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IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

Plaintiff,

v.

Weyerhaeuser Company

Defendant.

CIVIL ACTION NO. 1 : 0 5 CV 0 0 0 3

Robert Holmes Bell
Chief, U.S. District Judge

CONSENT DECREE
FOR THE DESIGN AND IMPLEMENTATION OF CERTAIN RESPONSE ACTIONS
AT OPERABLE UNIT #4 AND THE PLAINWELL INC. MILL PROPERTY OF THE
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE

TABLE OF CONTENTS

I.	<u>BACKGROUND</u>	1
II.	<u>JURISDICTION</u>	3
III.	<u>PARTIES BOUND</u>	3
IV.	<u>DEFINITIONS</u>	3
V.	<u>GENERAL PROVISIONS</u>	8
VI.	<u>ESTABLISHMENT AND USE OF CERTAIN SITE-SPECIFIC ACCOUNTS</u>	9
VII.	<u>PERFORMANCE OF THE MILL RI/FS</u>	11
VIII.	<u>PERFORMANCE OF THE MILL WORK</u>	12
IX.	<u>PERFORMANCE OF THE OU4 WORK</u>	17
X.	<u>QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS</u>	21
XI.	<u>ACCESS AND INSTITUTIONAL CONTROLS</u>	22
XII.	<u>REPORTING REQUIREMENTS</u>	24
XIII.	<u>APPROVAL OF PLANS AND OTHER SUBMISSIONS</u>	25
XIV.	<u>PROJECT COORDINATORS</u>	27
XV.	<u>ASSURANCE OF ABILITY TO COMPLETE WORK</u>	27
XVI.	<u>CERTIFICATIONS OF COMPLETION</u>	28
XVII.	<u>EMERGENCY RESPONSE</u>	31
XVIII.	<u>PAYMENTS BY WEYERHAEUSER</u>	32
XIX.	<u>CONSENT DECREE FUNDING</u>	34
XX.	<u>INDEMNIFICATION AND INSURANCE</u>	35
XXI.	<u>FORCE MAJEURE</u>	36
XXII.	<u>DISPUTE RESOLUTION</u>	37
XXIII.	<u>STIPULATED PENALTIES</u>	39
XXIV.	<u>COVENANT NOT TO SUE BY UNITED STATES</u>	43
XXV.	<u>COVENANTS BY WEYERHAEUSER</u>	46
XXVI.	<u>EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION</u>	48
XXVII.	<u>ACCESS TO INFORMATION</u>	49
XXVIII.	<u>RETENTION OF RECORDS</u>	50
XXIX.	<u>NOTICES AND SUBMISSIONS</u>	51
XXX.	<u>EFFECTIVE DATE</u>	52
XXXI.	<u>RETENTION OF JURISDICTION</u>	52
XXXII.	<u>APPENDICES</u>	52
XXXIII.	<u>COMMUNITY RELATIONS.</u>	53
XXXIV.	<u>MODIFICATION</u>	53
XXXV.	<u>LODGING AND OPPORTUNITY FOR PUBLIC COMMENT</u>	54
XXXVI.	<u>SIGNATORIES/SERVICE</u>	54
XXXVII.	<u>FINAL JUDGMENT</u>	54

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I. BACKGROUND

A. The United States of America (“United States”), on behalf of the Administrator of the United States Environmental Protection Agency (“EPA”), filed a complaint in this matter pursuant to Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”), 42 U.S.C. §§ 9606, 9607 (the “Complaint”).

B. The United States’ Complaint seeks, *inter alia*: (i) reimbursement of certain costs incurred by the United States for response actions at the 12th Street Landfill Operable Unit #4 (“OU4”) and the Plainwell Inc. mill property (the “Mill”), plus interest, at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (the “Site”) in Allegan and Kalamazoo Counties, Michigan; and (ii) performance of response activities by Weyerhaeuser Company (“Weyerhaeuser”) at the Mill and OU4, consistent with the National Contingency Plan, 40 C.F.R. Part 300 (as amended) (the “NCP”).

C. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the *Federal Register* on August 30, 1990, 55 Fed. Reg. 35502.

D. In July 1993, in response to a release or a substantial threat of a release of hazardous substances at the Site, the Michigan Department of Environmental Quality (“MDEQ”) entered into an agreement with several parties, not including Weyerhaeuser, for the performance of a Remedial Investigation and Feasibility Study for, *inter alia*, OU4 (the “OU4 RI/FS”) in accordance with 40 C.F.R. § 300.430. The Remedial Investigation (“RI”) Report and Final Feasibility Study (“FS”) were completed for OU4 in July 1997.

E. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, notice of completion of the FS and proposed plan for remedial action at OU4 (the “OU4 Proposed Plan”) was published in a major local newspaper of general circulation. MDEQ provided an opportunity for written and oral comments from the public on the OU4 Proposed Plan. A copy of the transcript of the public meeting has been made available to the public as part of the administrative record upon which MDEQ based its selection of the response action.

F. MDEQ’s decision on the final remedial action to be implemented at OU4 was embodied in a final record of decision (“OU4 ROD”) issued on September 28, 2001, with EPA’s concurrence. The OU4 ROD includes a summary of responses to the comments received by MDEQ on the OU4 Proposed Plan. Notice of the selected remedy was published in accordance with Section 117(b) of CERCLA.

G. Pursuant to this Consent Decree, Weyerhaeuser shall implement the remedy identified in the 2001 OU4 ROD.

H. Also, pursuant to this Consent Decree, Weyerhaeuser shall perform the Remedial Investigation and Feasibility Study for the Mill (“Mill RI/FS”) and shall implement the Mill remedy to be selected by EPA and set forth in the Record of Decision for the Mill (“Mill ROD”).

I. Based on the information presently available to EPA, EPA believes that the Mill RI/FS, Mill Work, and OU4 Work (as defined below) will be properly and promptly completed by Weyerhaeuser if conducted in accordance with the requirements of this Consent Decree and its appendices.

J. Solely for the purposes of Section 113(j) of CERCLA, the remedial actions to be performed by Weyerhaeuser pursuant to this Consent Decree shall constitute response actions taken or ordered by the President.

K. In accordance with the NCP and Section 121(f)(1)(F) of CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the State of Michigan of negotiations with Weyerhaeuser regarding the implementation of the remedial design and remedial action for OU4 and the Plainwell Mill Property, and EPA has provided the State with an opportunity to participate in such negotiations and be a party to this Consent Decree.

L. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), EPA notified the United States Department of the Interior and the National Oceanic and Atmospheric Administration of the United States Department of Commerce of negotiations with Weyerhaeuser regarding the release of hazardous substances that may have resulted in injury to the natural resources under federal trusteeship and encouraged the trustees to participate in the negotiation of this Consent Decree. This Consent Decree does not resolve any liability for natural resource damages at the Site.

M. Prior to this Consent Decree:

(i) the United States and State of Michigan reached a settlement with several potentially responsible parties known as the Plainwell Parties for, among other things, past and future response costs incurred or to be incurred in connection with OU4 and the Mill (“Plainwell Settlement Agreement”);

(ii) the Plainwell Settlement Agreement was lodged with the U.S. Bankruptcy Court for the District of Delaware on November 3, 2003, and subsequently withdrawn to the U.S. District Court under the caption *Weyerhaeuser Company v. Plainwell Inc., et al.*, Civil Action No. 03-CV-1079; and

(iii) in comments submitted to the United States Department of Justice, Weyerhaeuser objected to, among other things, the manner in which proceeds from the Plainwell Settlement

Agreement would be used at the Site.

N. Through this Consent Decree, the Parties resolve Weyerhaeuser's claims, objections, and contentions regarding the Plainwell Settlement Agreement.

O. Also, through this Consent Decree, the Parties resolve the United States' claims against Weyerhaeuser for liability at OU4 and the Mill as set forth in the United States' Complaint, but not for liability at any other area or operable unit at the Site.

P. Weyerhaeuser does not admit any liability to the United States or any other party arising out of the transactions or occurrences alleged in the Complaint and/or in this Consent Decree, nor does it acknowledge that the release or threatened release of hazardous substances at or from the Site, including the Mill and OU4, constitutes an imminent or substantial endangerment to the public health or welfare or the environment.

Q. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and implementation of this Consent Decree will expedite the cleanup of the Site and will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

II. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9606, 9607, and 9613(b). This Court also has personal jurisdiction over Weyerhaeuser. Solely for the purposes of this Consent Decree and the underlying Complaint, Weyerhaeuser waives all objections and defenses that it may have to jurisdiction of the Court or to venue in this District. Weyerhaeuser shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

III. PARTIES BOUND

2. This Consent Decree applies to and is binding upon the United States and upon Weyerhaeuser and its successors and assigns. Any change in ownership or corporate status of Weyerhaeuser including, but not limited to, any transfer of assets or real or personal property, shall in no way alter Weyerhaeuser's responsibilities under this Consent Decree.

3. Weyerhaeuser shall provide a copy of this Consent Decree to each contractor hired to perform the Mill RI/FS, Mill Work, and OU4 Work (as defined below) required by this Consent Decree and shall condition all contracts entered into hereunder upon performance of the Mill RI/FS, Mill Work, and OU4 Work in conformity with the terms of this Consent Decree. Weyerhaeuser or its contractors shall provide written notice of the Consent Decree to all subcontractors hired to perform any portion of the Mill RI/FS, Mill Work, and OU4 Work required by this Consent Decree. Weyerhaeuser shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Mill RI/FS, Mill Work, and OU4 Work contemplated herein in accordance with this Consent Decree. With regard to the activities undertaken pursuant to this Consent Decree, each contractor and subcontractor shall be deemed to be in a contractual relationship with Weyerhaeuser within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

IV. DEFINITIONS

4. Unless otherwise expressly provided herein, terms used in this Consent Decree which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Consent Decree or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

“Allied Paper, Inc./Portage Creek/Kalamazoo River Special Account” shall mean that special

account that will be created within the EPA Hazardous Substance Superfund upon entry of the Plainwell Settlement Agreement.

“CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 *et seq.*

“Consent Decree” shall mean this Decree and all appendices attached hereto (listed in Section XXXII). In the event of conflict between this Decree and any appendix, this Decree shall control.

“Day” shall mean a calendar day unless expressly stated to be a working day. “Working day” shall mean a day other than a Saturday, Sunday, or federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

“Effective Date” shall be the effective date of this Consent Decree as provided in Section XXX.

“EPA” shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

“EPA Hazardous Substance Superfund” shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

“Interim Response Costs” shall mean all costs, including direct and indirect costs, (a) paid by the United States in connection with OU4 and the Mill between March 31, 2004 and the Effective Date, or (b) incurred prior to the Effective Date but paid after that date.

“Interest,” unless stated otherwise, shall mean interest earned at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1st of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of such interest shall be the rate in effect at the time the interest accrues and shall be

subject to change on October 1st of each year.

“Kalamazoo River Operable Unit #5” or “OU5” shall mean the River Operable Unit of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (“Site”).

“Kalamazoo River Special Account” or “River Special Account” shall mean the special account established by EPA and funded exclusively by Weyerhaeuser in accordance with Section VI of this Consent Decree and Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

“MDEQ” shall mean the Michigan Department of Environmental Quality.

“Mill” or “Mill Property” shall mean the property located at or near 200 Allegan Street in Plainwell, Michigan as described in Appendix H attached hereto.

“Mill Operation and Maintenance” or “Mill O & M” shall mean any activities required to maintain the effectiveness of the Mill Remedial Action as required under the Mill ROD, the Mill Operation and Maintenance Plan and the Mill Statement of Work to be approved or developed by EPA pursuant to this Consent Decree. Mill O & M shall not include any operation and maintenance of any portion of the Mill Property, if any, located between the top of the banks of the Kalamazoo River and the middle of the Kalamazoo River stream bed. Any operation and maintenance of such river banks and adjacent stream bed sediments will be addressed as part of the remedial action to be developed by EPA for the Kalamazoo River Operable Unit.

“Mill Performance Standards” shall mean the cleanup standards and other measures of achievement of the goals of the Mill Remedial Action to be set forth in the Mill ROD and the Mill SOW, including alternative standards, if any, established in the Mill ROD through application of a technical impracticability waiver.

“Mill Record of Decision” or “Mill ROD” shall mean the Record of Decision to be issued by EPA for the Mill remedy after completion of the Remedial Investigation and Feasibility Study.

“Mill Remedial Action” shall mean those activities, except for Mill Operation and Maintenance, to be undertaken by Weyerhaeuser to implement the Mill ROD, in accordance with the Mill SOW, the final Mill Remedial Design and Mill Remedial Action Work Plan, and other plans to be approved by EPA. For purposes of this Consent Decree only, the Mill Remedial Action shall not include any portion of the Mill Property, if any, located between the top of the banks of the Kalamazoo River and the middle of the Kalamazoo River stream bed. Such river banks and any adjacent river sediments will be addressed as part of the remedial action to be developed by EPA for the Kalamazoo River Operable Unit.

“Mill Remedial Action Work Plan” shall mean the document(s) to be developed pursuant to Paragraph 21 of this Consent Decree and to be approved by EPA, and any amendments thereto.

“Mill Remedial Design” shall mean those activities to be undertaken by Weyerhaeuser to develop the final plans and specifications for the Mill Remedial Action pursuant to the Mill Remedial Design Work Plan.

“Mill Remedial Design Work Plan” or “Mill RD Work Plan” shall mean the document to be developed pursuant to Paragraph 20 of this Consent Decree and to be approved by EPA, and any amendments thereto.

“Mill Remedial Investigation and Feasibility Study” or “Mill RI/FS” shall mean those activities to be undertaken by Weyerhaeuser to assess the nature and extent of contamination at the Mill and to evaluate the feasibility of potential remedial alternatives for mitigating any hazards or risks to public health, welfare, or the environment posed by such contamination, pursuant to Section VII of this Consent Decree and the Mill RI/FS SOW to be developed by EPA.

“Mill Remedial Investigation and Feasibility Study Statement of Work” or “Mill RI/FS SOW” shall mean the statement of work to be developed by EPA in accordance with CERCLA, the

NCP, and any applicable EPA guidance, for the implementation of the Mill RI/FS under this Consent Decree.

“Mill Statement of Work” or “Mill SOW” shall mean the statement of work to be developed by EPA for the implementation of the Remedial Design, Remedial Action, and Operation and Maintenance at the Mill.

“Mill Supervising Contractor” shall mean the principal contractor retained by Weyerhaeuser to supervise and direct the implementation of the Mill Work under this Consent Decree.

“Mill Work” shall mean all activities, relating to the Mill remedy, that Weyerhaeuser is required to perform under this Consent Decree, except those required by Section XXVIII (Retention of Records).

“National Contingency Plan” or “NCP” shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

“Operable Unit 4” or “OU4” shall mean the 12th Street Landfill Operable Unit 4 of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site, as described in the OU4 ROD and in Appendix A and generally shown on the map attached hereto as Appendix B.

“Operable Unit 4/Plainwell Mill Property Disbursement Special Account” or “Disbursement Special Account” shall mean the disbursement special account established by EPA in accordance with Section VI of this Consent Decree and Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

“OU4 Operation and Maintenance” or “OU4 O & M” shall mean all activities required to maintain the effectiveness of the OU4 Remedial Action as required under the OU4 Operation and Maintenance Plan approved or developed by EPA pursuant to this Consent Decree and the OU4 Statement of Work.

“OU4 Performance Standards” shall mean the cleanup standards and other measures of achievement of the goals of the OU4 Remedial Action set forth in the OU4 ROD and OU4 SOW.

“OU4 Record of Decision” or “OU4 ROD” shall mean the Record of Decision for the 12th Street Landfill OU4 of the Site, signed on September 28, 2001 by the Director of MDEQ, and all attachments thereto. The OU4 ROD and the Declaration to the OU4 ROD are attached hereto as Appendix C.

“OU4 Remedial Action” shall mean those activities, except for OU4 Operation and Maintenance, to be undertaken by Weyerhaeuser to implement the OU4 ROD, in accordance with the OU4 SOW, the final OU4 Remedial Design and OU4 Remedial Action Work Plan and other plans approved by EPA.

“OU4 Remedial Action Work Plan” shall mean the document(s) developed pursuant to Paragraph 29 of this Consent Decree and approved by EPA, and any amendments thereto.

“OU4 Remedial Design” shall mean those activities to be undertaken by Weyerhaeuser to develop the final plans and specifications for the OU4 Remedial Action pursuant to the OU4 Remedial Design Work Plan.

“OU4 Remedial Design Work Plan” or “OU4 RD Work Plan” shall mean the document developed pursuant to Paragraph 28 of this Consent Decree and approved by EPA, and any amendments thereto.

“OU4 Statement of Work” or “OU4 SOW” shall mean the statement of work for implementation of the Remedial Design, Remedial Action, and Operation and Maintenance at OU4, as set forth in Appendix E to this Consent Decree, and any modifications made in accordance with this Consent Decree.

“OU4 Supervising Contractor” shall mean the principal contractor retained by Weyerhaeuser

to supervise and direct the implementation of the OU4 Work under this Consent Decree.

“OU4 Work” shall mean all activities relating to the OU4 remedy that Weyerhaeuser is required to perform under this Consent Decree, excluding those activities Weyerhaeuser is required to perform under Section XXVIII (Retention of Records).

“Paragraph” shall mean a portion of this Consent Decree identified by an arabic numeral or an upper case letter.

“Parties” shall mean the United States and Weyerhaeuser Company.

“Past Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs that the United States paid at or in connection with OU4 and the Mill between October 1, 1980, and March 31, 2004 plus Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through September 30, 2004.

“Plaintiff” shall mean the United States.

“Plainwell Settlement Agreement” shall mean solely that agreement entered into by the United States, the State of Michigan, Colonial Heights Packaging Inc., Philip Morris USA Inc, Chesapeake Corporation, Simpson Paper Company, Plainwell Holding Company and Plainwell Inc., lodged with the U.S. Bankruptcy Court for the District of Delaware on November 3, 2003, and subsequently withdrawn to the U.S. District Court under the caption *Weyerhaeuser Company v. Plainwell Inc., et al.*, Civil Action No. 03-CV-1079.

“Proposed Plan” shall mean the proposed plan for the Mill remedy.

“RCRA” shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 *et seq.* (also known as the Resource Conservation and Recovery Act).

“Remedial Action” shall mean the OU4 Remedial Action and the Mill Remedial Action, collectively.

“Remedial Design” shall mean the OU4 Remedial Design and the Mill Remedial Design, collectively.

“River Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs incurred or to be incurred by EPA at or in connection with the Kalamazoo River Operable Unit.

“Section” shall mean a portion of this Consent Decree identified by a Roman numeral.

“Site” shall mean the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site, located in Allegan and Kalamazoo Counties, Michigan, and depicted generally on the map attached hereto as Appendix D.

“Specified Future Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Consent Decree, verifying the Mill RI/FS, Mill Work and OU4 Work, or otherwise implementing, overseeing, or enforcing this Consent Decree, including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraphs 15 (Disputes Concerning the Mill RI/FS), 26 (Mill Remedy Review), 34 (OU4 Remedy Review), and 107 (Work Takeover); and Sections XI (Access and Institutional Controls) (including, but not limited to, the cost of attorney time and any monies paid to secure access and/or to secure or implement institutional controls including, but not limited to, the amount of just compensation) and XVII (Emergency Response). Specified Future Response Costs shall also include all Interim Response Costs and all Interest on those Past Response Costs Weyerhaeuser has agreed to reimburse under this Consent Decree that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from March 31, 2004 to the date of entry of this Consent Decree.

“State” shall mean the State of Michigan.

“Weyerhaeuser Company” or “Weyerhaeuser” shall mean Weyerhaeuser Company and its

successors and assigns.

“Work” shall mean the Mill RI/FS, the OU4 Work, and the Mill Work, collectively.

“United States” shall mean the United States of America, and its departments, agencies and instrumentalities, including EPA.

“Waste Material” shall mean (i) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (ii) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); (iii) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (iv) any “hazardous substance” under Part 201 of NREPA, MCL § 324.20101.

V. GENERAL PROVISIONS

5. Objectives of the Parties. The objectives of the Parties in entering into this Consent Decree are: (i) for Weyerhaeuser to design and implement certain response actions at OU4 and the Mill; (ii) for EPA to create and fund the Disbursement Special Account with \$6.2 million of the proceeds from the Plainwell Settlement Agreement and to reimburse up to \$6.2 million of the funds in the Disbursement Special Account to Weyerhaeuser for certain response costs at the Mill and OU4 in accordance with the terms of Appendix G; (iii) for Weyerhaeuser to pay to EPA \$6.2 million plus interest which EPA shall direct to the Kalamazoo River Special Account and use solely to pay or reimburse response costs at or in connection with the Kalamazoo River Operable Unit; (iv) for EPA to draw first upon funds in the Kalamazoo River Special Account to conduct or finance response actions at the Kalamazoo River Operable Unit, until such time as the funds (excluding interest) are depleted; (v) for Weyerhaeuser to reimburse EPA’s Past Response Costs; (vi) for Weyerhaeuser to reimburse all Specified Future Response Costs; (vii) to resolve the United States’ claims against Weyerhaeuser solely for liability at OU4 and the Mill, but not at any other area or operable unit at the Site; and (viii) to resolve the objections of Weyerhaeuser to the Plainwell Settlement Agreement.

6. Commitments by Weyerhaeuser.

a. Weyerhaeuser shall make payments to EPA as provided in Section XVIII of this Consent Decree.

b. Weyerhaeuser shall finance and perform the Mill RI/FS, as provided in Section VII of this Consent Decree.

c. Weyerhaeuser shall finance and perform the Mill Work in accordance with this Consent Decree, the Mill ROD, the Mill SOW, and all work plans and other plans, standards, specifications, and schedules set forth herein or developed by Weyerhaeuser and approved by EPA pursuant to this Consent Decree, as provided in Section VIII of this Consent Decree.

d. Weyerhaeuser shall finance and perform the OU4 Work in accordance with this Consent Decree, the OU4 ROD, the Statement of Work for OU4 ("OU4 SOW"), and all work plans and other plans, standards, specifications, and schedules set forth herein or developed by Weyerhaeuser and approved by EPA pursuant to this Consent Decree, as provided in Section IX of this Consent Decree.

e. As provided by Section XVIII, Weyerhaeuser shall reimburse EPA for a portion of EPA's Past Response Costs and for EPA's Specified Future Response Costs, and pay EPA \$6.2 million plus Interest earned which shall be used first by EPA when paying and reimbursing response costs incurred or to be incurred by EPA at or in connection with the Kalamazoo River Operable Unit.

f. Weyerhaeuser shall withdraw any objections to, or claims and contentions related to, the Plainwell Settlement Agreement, as provided by Paragraph 110 of Section XXV (Covenants by Weyerhaeuser).

7. Weyerhaeuser shall not be required to begin the Mill RI/FS, Mill Work, and OU4

Work until EPA creates and funds the Disbursement Special Account, and creates the River Special Account, as provided in Section VI (Establishment and Use of Certain Site-Specific Accounts) of this Consent Decree. Subject to paragraph 10 of this Consent Decree, if EPA fails to create and fund the Disbursement Special Account, or create the River Special Account, or both, Weyerhaeuser may apply to this Court for appropriate relief.

8. Compliance with Applicable Law. All activities undertaken by Weyerhaeuser pursuant to this Consent Decree shall be performed in accordance with the requirements of all applicable federal and State laws and regulations. Weyerhaeuser must also comply with all applicable or relevant and appropriate requirements of all federal and State environmental laws as set forth in the Mill ROD, the OU4 ROD, the Mill SOW and the OU4 SOW. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

9. Permits

a. As provided in Section 121(e) of CERCLA and Section 300.400(e) of the NCP, no permit shall be required for any portion of the Mill RI/FS, Mill Work, and OU4 Work conducted entirely on-Site (*i.e.*, within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Mill RI/FS, Mill Work, and OU4 Work that is not on-Site requires a federal or state permit or approval, Weyerhaeuser shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. Weyerhaeuser may seek relief under the provisions of Section XXI (Force Majeure) of this Consent Decree for any delay in the performance of the Mill RI/FS, Mill Work, or OU4 Work resulting from a failure to obtain, or a delay in obtaining, any permit required for the Mill

RI/FS, Mill Work, or OU4 Work.

c. This Consent Decree is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

VI. ESTABLISHMENT AND USE OF CERTAIN SITE-SPECIFIC ACCOUNTS

10. Generally. As provided by this Section and Appendix G, two separate Site-Specific accounts - to be known as the Kalamazoo River Special Account (the "River Special Account") and Operable Unit #4/Plainwell Mill Property Disbursement Special Account (the "Disbursement Special Account") - shall be established and used to provide sources of funds for payment and reimbursement of certain Site-related response costs, as specified in Paragraphs 11 - 13 of this Consent Decree. EPA's obligation to establish the River Special Account and Disbursement Special Account is contingent upon the creation and funding of the Allied Paper, Inc./Portage Creek/Kalamazoo River Special Account pursuant to the terms and conditions of the Plainwell Settlement Agreement, and payment of funds by Weyerhaeuser to EPA pursuant to Paragraph 69 of Section XVIII (Payments by Weyerhaeuser).

11. Establishment and Management of the Disbursement Special Account. Subject to the provisions of Paragraph 10, once the Allied Paper, Inc./Portage Creek/Kalamazoo River Special Account is fully funded and EPA is prepared to create and fund the Disbursement Special Account, EPA shall provide written notice to Weyerhaeuser. Within ten days of receipt of such notice, Weyerhaeuser shall, pursuant to Paragraph 69, make initial payments to EPA totaling \$6,338,851.53 million plus interest. Upon receipt of such payments from Weyerhaeuser, EPA shall immediately establish the Disbursement Special Account as a new special account within the EPA Hazardous Substance Superfund. Subject to the terms and conditions set forth in this Consent Decree, EPA shall transfer \$6.2 million from the Allied Paper, Inc./Portage Creek/Kalamazoo River Special

Account to the Disbursement Special Account. EPA shall use up to \$6.2 million of these funds, excluding interest earned, to reimburse Weyerhaeuser for certain Allowable Costs at OU4 and the Mill, as defined in Paragraph 12. EPA shall disburse funds in the Disbursement Special Account to Weyerhaeuser in accordance with the procedures and milestones for phased disbursements set forth in Appendix G to this Consent Decree, which is incorporated herein by reference.

12. The OU4 and Mill response costs that will be reimbursed from the Disbursement Special Account shall include certain costs incurred by Weyerhaeuser that are defined herein as “Allowable Costs.” The term “Allowable Costs” is defined as response costs incurred and paid by Weyerhaeuser while performing the Mill RI/FS, Mill Work, and OU4 Work, excluding the following:

- a. any payments made by Weyerhaeuser to EPA pursuant to this Consent Decree, including, but not limited to: (i) any direct payments to EPA under Section XVIII (Payments by Weyerhaeuser); and (ii) any interest or stipulated penalties paid pursuant to Section XXIII (Stipulated Penalties);
- b. attorneys’ fees and costs, except reasonable attorneys’ fees and costs for obtaining access or institutional controls as required by Section XI;
- c. costs of any response activities Weyerhaeuser performs that are not required under, or approved by EPA pursuant to, this Consent Decree;
- d. costs related to Weyerhaeuser’s litigation, settlement, or development of potential contribution claims or identification of defendants, including costs relating to the negotiation or entry of this Consent Decree;
- e. internal costs of Weyerhaeuser, including but not limited to, salaries, travel, or in-kind services;

- f. any costs incurred by Weyerhaeuser prior to the Effective Date; or
- g. any costs incurred by Weyerhaeuser pursuant to Section XXII (Dispute Resolution).

13. Establishment of the River Special Account. Within 30 days of EPA's receipt of payment from Weyerhaeuser pursuant to Paragraph 69.a of Section XVIII (Payments by Weyerhaeuser), EPA shall establish the River Special Account as a new special account within the EPA Hazardous Substance Superfund. The River Special Account shall be funded by EPA in accordance with Paragraph 69.c of Section XVIII (Payments by Weyerhaeuser). Subject to the terms and conditions set forth in this Consent Decree, EPA agrees to use the funds in the River Special Account, as specified in Paragraph 69.c of Section XVIII (Payments by Weyerhaeuser).

VII. PERFORMANCE OF MILL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

14. Performance of the Mill RI/FS. Weyerhaeuser shall finance and perform the Mill Remedial Investigation and Feasibility Study ("Mill RI/FS") in accordance with the Mill RI/FS SOW. Weyerhaeuser shall identify and propose Performance Standards for the Mill ("Mill Performance Standards"), including all "applicable or relevant and appropriate requirements" as required by Section 121(d) of CERCLA, 42 U.S.C. § 9621(d), and 40 C.F.R. § 300.400(g), and in accordance with the requirements and schedule established in or pursuant to the Mill RI/FS Statement of Work. Pursuant to the Mill RI/FS Statement of Work, Weyerhaeuser shall determine the nature and extent of contamination at the Mill to support the development and evaluation of remedial alternatives, shall evaluate risk to human health and the environment from the contamination, and shall develop and evaluate the feasibility of potential remedial alternatives for mitigating any hazards or risks to public health, welfare, or the environment posed by such

contamination.

15. Disputes Concerning the Mill RI/FS

a. Except as provided in Section XXI (Force Majeure), and Section XXIII (Stipulated Penalties), and except for disputes arising under Section XI (Access and Institutional Controls), the provisions of this Paragraph shall be the sole mechanism for the resolution of disputes concerning the Mill RI/FS. Any dispute subject to the provisions of this Paragraph shall not be subject to judicial review or to the provisions of Section XXII (Dispute Resolution). Weyerhaeuser shall attempt to resolve any dispute concerning the Mill RI/FS through informal negotiations with EPA during a period not to exceed 14 days, commencing 7 days from the time Weyerhaeuser sends written notice of the dispute to EPA. If requested by Weyerhaeuser during informal negotiations, representatives of EPA shall meet with representatives of Weyerhaeuser in an effort to resolve the dispute.

b. In the event that informal negotiations do not resolve the dispute, then within 14 days after the conclusion of the informal negotiation period Weyerhaeuser shall serve on EPA, with a copy to MDEQ, a written Statement of Position on the matter, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by Weyerhaeuser, and concurrently EPA shall serve on Weyerhaeuser, with a copy to MDEQ, its Statement of Position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA. Within 10 days after EPA's service of its position on Weyerhaeuser, the Director of Region 5 Superfund Division shall make a final decision with regard to the dispute and shall notify Weyerhaeuser of that decision in writing, with a copy to MDEQ.

VIII. PERFORMANCE OF THE MILL WORK

A. Selection of the Mill Remedy

16. As provided in Section 121 of CERCLA, 42 U.S.C. § 9621, and the NCP, and in a manner consistent with Section 117 of CERCLA, 42 U.S.C. § 9617, EPA shall select the remedy for the Mill and shall issue a Mill ROD setting forth the selected remedy.

a. Proposed Plan for the Mill. Consistent with Section 117(a) of CERCLA, 42 U.S.C. § 9617(a), prior to issuing the Mill ROD, EPA shall issue a proposed plan for the Mill remedy ("Proposed Plan").

b. EPA shall provide a copy of the Proposed Plan to Weyerhaeuser and shall submit the Proposed Plan for public comment in accordance with Section 117(a) of CERCLA, 42 U.S.C. § 9617(a). The dispute resolution provisions of this Consent Decree are not applicable to the Proposed Plan or the Mill ROD. However, Weyerhaeuser may comment on the Proposed Plan as provided in Section 300.430(f)(3)(C) and (D) of the NCP.

17. After issuance of the Mill ROD, EPA shall issue to Weyerhaeuser a draft Mill SOW, with a copy to MDEQ. Weyerhaeuser may provide EPA, with a copy to MDEQ, with comments on the draft Mill SOW within 45 days after receipt of the draft SOW. EPA shall consider any comments received and, after a reasonable opportunity for review and comment by MDEQ, shall issue to Weyerhaeuser a final Mill SOW, which shall be incorporated into and shall become enforceable as a part of this Consent Decree. Before issuance of the final Mill SOW, EPA shall meet with Weyerhaeuser with regard to all significant comments raised by Weyerhaeuser on the SOW.

B. Performance of Mill Work

18. Weyerhaeuser shall perform the Mill Work as set forth in this Section VIII.

19. Selection of Mill Supervising Contractor

a. All components of the Mill Work to be performed by Weyerhaeuser pursuant to this Section and Sections X (Quality Assurance, Sampling and Data Analysis) and XVII (Emergency Response) of this Consent Decree shall be under the direction and supervision of the Mill Supervising Contractor, the selection of which shall be subject to disapproval by EPA. Within 10 days of the issuance of the final Mill SOW, Weyerhaeuser shall notify EPA in writing of the name, title, and qualifications of any contractor proposed to be the Mill Supervising Contractor. With respect to any contractor proposed to be Mill Supervising Contractor, Weyerhaeuser shall demonstrate that the proposed contractor has a quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. EPA will issue a notice of disapproval or an authorization to proceed. If at any time thereafter, Weyerhaeuser proposes to change a Mill Supervising Contractor, Weyerhaeuser shall give such notice to EPA and must obtain an authorization to proceed from EPA before the new Mill Supervising Contractor performs, directs, or supervises any Mill Work under this Consent Decree.

b. If EPA disapproves a proposed Mill Supervising Contractor, EPA will notify Weyerhaeuser in writing. Weyerhaeuser shall submit to EPA a list of contractors, including the qualifications of each contractor, that would be acceptable to Weyerhaeuser within 30 days of receipt of EPA's disapproval of the contractor previously proposed. EPA will provide written notice of the names of any contractor(s) that it disapproves and an authorization to proceed with respect to any of the other contractors. Weyerhaeuser may select any contractor from that list that is not

disapproved and shall notify EPA of the name of the contractor selected within 21 days of EPA's authorization to proceed.

c. If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents Weyerhaeuser from meeting one or more deadlines in a plan approved by the EPA pursuant to this Consent Decree, Weyerhaeuser may seek relief under the provisions of Section XXI (Force Majeure).

20. Mill Remedial Design

a. Within 60 days after EPA's issuance of an authorization to proceed pursuant to Paragraph 19, Weyerhaeuser shall submit to EPA a work plan for the design of the Remedial Action at the Mill ("Mill Remedial Design Work Plan" or "Mill RD Work Plan"). The Mill RD Work Plan shall provide for design of the remedy set forth in the ROD, in accordance with the Mill SOW and for achievement of the Mill Performance Standards and other requirements set forth in the Mill ROD and Mill SOW and/or this Consent Decree. Upon its approval by EPA, the Mill Remedial Design Work Plan shall be incorporated into and become enforceable under this Consent Decree. Within 30 days after EPA's issuance of an authorization to proceed, Weyerhaeuser shall submit to EPA an amendment to the RI/FS Health and Safety Plan that addresses field design activities and which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120. The Health and Safety Plan amendment shall comprise part of the Mill RD Work Plan.

b. Unless otherwise required by EPA, the Mill Remedial Design Work Plan shall include plans and schedules for implementation of all remedial design and pre-design tasks identified in the Mill SOW, including, but not limited to, plans and schedules for the completion of: the pre-design Quality Assurance Project Plan, Health and Safety Plan, the Construction Quality Assurance

Plan and a pre-design Field Sampling Plan. In addition, the Mill RD Work Plan shall include a schedule for completion of the Mill Remedial Action Work Plan. If, pursuant to Section XIII (Approval of Plans and Other Submissions), EPA notifies Weyerhaeuser of its disapproval of the RD Work Plan, Weyerhaeuser shall submit revisions to the RD Work Plan within 30 days of the date of the notice of disapproval or within a longer period of time if specified by EPA in such notice.

c. Upon approval of the Mill RD Work Plan by EPA, after a reasonable opportunity for review and comment by MDEQ, and submittal of the Health and Safety Plan for all pre-design field activities to EPA, Weyerhaeuser shall implement the Mill RD Work Plan. Weyerhaeuser shall submit to EPA all plans, submittals and other deliverables required under the approved Mill RD Work Plan in accordance with the approved schedule for review and approval pursuant to Section XIII (Approval of Plans and Other Submissions). Unless otherwise directed or approved by EPA, Weyerhaeuser shall not commence further remedial design activities at the Mill prior to approval of the Mill RD Work Plan.

d. If the Mill RD Work Plan requires an EPA-approved preliminary design, the preliminary design submittal shall include, at a minimum, the following: (1) design criteria; (2) results of additional field sampling and pre-design work; (3) project delivery strategy; (4) preliminary plans, drawings and sketches; (5) required specifications in outline form; and (6) a preliminary construction schedule.

e. The intermediate design submittal, if required by EPA, or if independently submitted by Weyerhaeuser, shall be a continuation and expansion of the preliminary design. Any value engineering proposals must be identified and evaluated by Weyerhaeuser during this review.

f. Unless otherwise directed by EPA, in the approved Mill RD Work Plan, the final design submittal shall include, at a minimum, the following: (1) final plans and specifications;

(2) Operation and Maintenance Plan; (3) Construction Quality Assurance Project Plan (“CQAPP”); (4) Contingency Plan; and (5) Performance Standards Verification Plan (“PSVP”). The CQAPP, which shall detail the approach to quality assurance during construction activities at the Mill, shall specify a quality assurance official (“QA Official”), to conduct a quality assurance program during the construction phase of the project. The PSVP shall explain in detail which mechanisms will ensure that the RA achieves the overall Remedial Action Objectives (“RAOs”) developed and defined in the ROD, including those RAOs that are not based on concentration levels of hazardous substances. The PSVP shall include confirmation sampling.

21. Mill Remedial Action

a. Within 45 days after the approval of the final design submittal, Weyerhaeuser shall submit to EPA a work plan for the performance of the Remedial Action at the Mill (“Mill Remedial Action Work Plan”). The Mill Remedial Action Work Plan shall provide for construction and implementation of the remedy set forth in the Mill ROD and achievement of the Mill Performance Standards, in accordance with this Consent Decree, the Mill ROD and Mill SOW, and the design plans and specifications developed in accordance with the Mill RD Work Plan and approved by EPA. Upon its approval by EPA, the Mill Remedial Action Work Plan shall be incorporated into and become enforceable under this Consent Decree. At the same time as it submits the Mill Remedial Action Work Plan, Weyerhaeuser shall submit to EPA a Health and Safety Plan for field activities required by the Mill Remedial Action Work Plan which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120.

b. The Mill Remedial Action Work Plan shall include all requirements specified in the Mill SOW and, unless otherwise directed by EPA, in the approved RD Work Plan, and shall

include the following deliverables: (1) the schedule for completion of the Mill Remedial Action; (2) the schedule for developing and submitting other required Mill Remedial Action plans; (3) methodology for implementation of the CQAPP; (4) the PSVP; (5) methods for satisfying permitting requirements; (6) preliminary methodology for implementation of the Operation and Maintenance Plan; (7) methodology for implementation of the Contingency Plan; (8) a Construction Quality Assurance Plan; and (9) procedures and plans for the decontamination of equipment and the disposal of contaminated materials. The Mill Remedial Action Work Plan also shall include a schedule for implementation of all Mill Remedial Action tasks identified in the final design submittal, and shall identify the initial formulation of Weyerhaeuser's Mill Remedial Action project team (including, but not limited to, the Mill Supervising Contractor). If, pursuant to Section XIII (Approval of Plans and Other Submissions), EPA notifies Weyerhaeuser of its disapproval of the RA Work Plan, Weyerhaeuser shall submit revisions to the RA Work Plan within 30 days of the date of the notice of disapproval or within a longer period of time if specified by EPA in such notice.

c. Upon approval of the Mill Remedial Action Work Plan by EPA, after a reasonable opportunity for review and comment by MDEQ, Weyerhaeuser shall implement the activities required under the Mill Remedial Action Work Plan. Weyerhaeuser shall submit to EPA all plans, submittals, or other deliverables required under the approved Mill Remedial Action Work Plan in accordance with the approved schedule for review and approval pursuant to Section XIII (Approval of Plans and Other Submissions). Unless otherwise directed or approved by EPA, Weyerhaeuser shall not commence physical Mill Remedial Action activities at the Site prior to approval of the Mill Remedial Action Work Plan.

22. Duration of the Mill Remedial Action and Mill Operation and Maintenance.

Weyerhaeuser shall continue to implement the Mill Remedial Action and Mill O & M until the Mill

Performance Standards are achieved and for so long thereafter as is otherwise required under this Consent Decree.

23. Modification of the Mill SOW and Related Work Plans

a. If EPA determines that modification to the work specified in the Mill SOW and/or in work plans developed pursuant to the Mill SOW is necessary to achieve and maintain the Mill Performance Standards or to carry out and maintain the effectiveness of the remedy set forth in the Mill ROD, EPA may require that such modification be incorporated in the Mill SOW and/or such work plans, provided, however, that a modification may only be required pursuant to this Paragraph to the extent that it is consistent with the scope of the remedy selected in the Mill ROD.

b. If Weyerhaeuser objects to any modification determined by EPA to be necessary pursuant to this Paragraph, it may seek dispute resolution pursuant to Paragraph 84 (Record Review) of Section XXII (Dispute Resolution). The Mill SOW and/or related work plans shall be modified in accordance with final resolution of the dispute.

c. Weyerhaeuser shall implement any work required by any modifications incorporated in the Mill SOW and/or in work plans developed pursuant to the Mill SOW in accordance with this Paragraph.

d. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions as otherwise provided in this Consent Decree.

24. Weyerhaeuser acknowledges and agrees that nothing in this Consent Decree, the Mill SOW, or Mill Remedial Design or Mill Remedial Action Work Plan constitutes a warranty or representation of any kind by the United States that compliance with the work requirements set forth in the Mill SOW and the work plans will achieve the Mill Performance Standards.

25. Weyerhaeuser shall, prior to any off-Site shipment of Waste Material from the Site

to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator of such shipment of Waste Material. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. Weyerhaeuser shall include in the written notification the following information, where available: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Weyerhaeuser shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state will be determined by Weyerhaeuser following the award of the contract for Mill Remedial Action construction. Weyerhaeuser shall provide the information required by this Paragraph as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

26. Mill Remedy Review

a. Periodic Review. If after the completion of all remedial actions at the Mill (excluding Mill O&M), any Waste Material remains at the Mill above levels that would allow for unlimited use and unrestricted exposure, Weyerhaeuser shall conduct and finance any studies and investigations as requested by EPA, in order to permit EPA to conduct reviews of whether the Mill Remedial Action is protective of human health and the environment. Weyerhaeuser shall conduct such studies no less than every five years unless required otherwise by Section 121(c) of CERCLA and any applicable regulations.

b. EPA Selection of Further Response Actions. In accordance with CERCLA, if EPA determines, at any time, that the Mill Remedial Action is not protective of human health and the environment, EPA may select further response actions for the Mill in accordance with the requirements of CERCLA and the NCP.

c. Opportunity to Comment. Weyerhaeuser and, if required by Sections 113(k)(2), 117, or 121(f) of CERCLA, MDEQ, and the public, will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review of the Mill Remedial Action conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the comment period.

d. Weyerhaeuser's Obligation to Perform Further Mill Actions. If EPA selects further response actions for the Mill, Weyerhaeuser shall perform such further response actions, to the extent that the reopener conditions of Paragraphs 102 and 103 (United States' reservations of rights, based on unknown conditions or new information) are satisfied. Upon selection of any such further Mill response actions (after the opportunity to comment described in Paragraph 26.c), EPA shall so notify Weyerhaeuser (with a copy to MDEQ) and shall provide Weyerhaeuser with a reasonable opportunity to perform such response actions as part of the Mill Work pursuant to this Consent Decree. Weyerhaeuser may invoke the procedures set forth in Section XXII (Dispute Resolution) to dispute (1) EPA's determination that the reopener conditions of Paragraphs 102 and 103 (United States' reservations of rights, based on unknown conditions or new information) are satisfied, (2) EPA's determination that the Mill Remedial Action is not protective of human health and the environment, or (3) EPA's selection of the further response actions. Disputes pertaining to whether the Mill Remedial Action is protective or to EPA's selection of further response actions shall be resolved pursuant to Paragraph 84 (Record Review).

e. Submissions of Plans. If Weyerhaeuser is required to perform further response actions at the Mill pursuant to Paragraph 26.d, it shall submit a plan for such work to EPA for approval in accordance with the procedures set forth in Section VIII (Performance of Mill Work) and shall implement the plan approved by EPA in accordance with the provisions of this Decree.

IX. PERFORMANCE OF OU4 WORK

27. Selection of OU4 Supervising Contractor

a. All components of the OU4 Work to be performed by Weyerhaeuser pursuant to this Section and Sections X (Quality Assurance, Sampling and Data Analysis) and XVII (Emergency Response) of this Consent Decree shall be under the direction and supervision of the OU4 Supervising Contractor, the selection of which shall be subject to disapproval by EPA. Within 10 days after the lodging of this Consent Decree, Weyerhaeuser shall notify EPA in writing of the name, title, and qualifications of any contractor proposed to be the OU4 Supervising Contractor. With respect to any contractor proposed to be Mill Supervising Contractor, Weyerhaeuser shall demonstrate that the proposed contractor has a quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. EPA will issue a notice of disapproval or an authorization to proceed. If at any time thereafter, Weyerhaeuser proposes to change an OU4 Supervising Contractor, Weyerhaeuser shall give such notice to EPA and must obtain an authorization to proceed from EPA before the new OU4 Supervising Contractor performs, directs, or supervises any OU4 Work under this Consent Decree.

b. If EPA disapproves a proposed OU4 Supervising Contractor, EPA will notify Weyerhaeuser in writing. Weyerhaeuser shall submit to EPA a list of contractors, including the qualifications of each contractor, that would be acceptable to Weyerhaeuser within 30 days of receipt of EPA's disapproval of the contractor previously proposed. EPA will provide written notice of the names of any contractor(s) that it disapproves and an authorization to proceed with respect to any of the other contractors. Weyerhaeuser may select any contractor from that list that is not disapproved and shall notify EPA of the name of the contractor selected within 21 days of EPA's authorization to proceed.

c. If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents Weyerhaeuser from meeting one or more deadlines in a plan approved by EPA pursuant to this Consent Decree, Weyerhaeuser may seek relief under the provisions of Section XXI (Force Majeure).

28. OU4 Remedial Design

a. Within 60 days after EPA's issuance of an authorization to proceed pursuant to Paragraph 27, Weyerhaeuser shall submit to EPA a work plan for the design of the Remedial Action at OU4 ("OU4 Remedial Design Work Plan" or "OU4 RD Work Plan"). The OU4 Remedial Design Work Plan shall provide for design of the remedy set forth in the OU4 ROD, in accordance with the OU4 SOW and for achievement of the OU4 Performance Standards and other requirements set forth in the OU4 ROD, this Consent Decree and/or the OU4 SOW. Upon its approval by EPA, the OU4 Remedial Design Work Plan shall be incorporated into and become enforceable under this Consent Decree. Within 30 days after EPA's issuance of an authorization to proceed, Weyerhaeuser shall submit to EPA a Health and Safety Plan for pre-field design activities which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not

limited to, 29 C.F.R. § 1910.120. The Health and Safety Plan shall comprise part of the OU4 RD Work Plan.

b. The OU4 Remedial Design Work Plan shall include plans and schedules for implementation of all remedial design and pre-design tasks identified in the OU4 SOW, including, but not limited to, plans and schedules for the completion of: the pre-design Quality Assurance Project Plan, Health and Safety Plan, the Construction Quality Assurance Plan and a pre-design Field Sampling Plan. In addition, the OU4 Remedial Design Work Plan shall include a schedule for completion of the OU4 Remedial Action Work Plan. If, pursuant to Section XIII (Approval of Plans and Other Submissions), EPA notifies Weyerhaeuser of its disapproval of the RD Work Plan, Weyerhaeuser shall submit revisions to the RD Work Plan within 30 days of the date of the notice of disapproval or within a longer period of time if specified by EPA in such notice.

c. Upon approval of the OU4 Remedial Design Work Plan by EPA, after a reasonable opportunity for review and comment by MDEQ, and submittal of the Health and Safety Plan for all pre-design field activities to EPA, Weyerhaeuser shall implement the OU4 Remedial Design Work Plan. Weyerhaeuser shall submit to EPA all plans, submittals and other deliverables required under the approved OU4 Remedial Design Work Plan in accordance with the approved schedule for review and approval pursuant to Section XIII (Approval of Plans and Other Submissions). Unless otherwise directed or approved by EPA, Weyerhaeuser shall not commence further OU4 Remedial Design activities at the Site prior to approval of the OU4 Remedial Design Work Plan.

d. If required by the approved OU4 RD Work Plan, the preliminary design submittal shall include, at a minimum, the following: (1) design criteria; (2) results of treatability studies; (3) results of additional field sampling and pre-design work; (4) project delivery strategy;

(5) preliminary plans, drawings and sketches; (6) required specifications in outline form; and (7) a preliminary construction schedule.

e. The intermediate design submittal, if required by EPA, or if independently submitted by Weyerhaeuser, shall be a continuation and expansion of the preliminary design. Any value engineering proposals must be identified and evaluated by Weyerhaeuser during this review.

f. Unless otherwise directed by EPA in the approved OU4 RD Work Plan, the final design submittal shall include, at a minimum, the following: (1) final plans and specifications; (2) OU4 Operation and Maintenance Plan; (3) Construction Quality Assurance Project Plan (“CQAPP”); (4) Contingency Plan; and (5) Performance Standards Verification Plan (“PSVP”). The CQAPP, which shall detail the approach to quality assurance during construction activities at OU4, shall specify a quality assurance official (“QA Official”), independent of the OU4 Supervising Contractor, to conduct a quality assurance program during the construction phase of the project. The PSVP shall explain in detail which mechanisms will ensure that the RA achieves the overall Remedial Action Objectives (“RAOs”) developed and defined in the ROD, including those RAOs that are not based on concentration levels of hazardous substances. The PSVP shall include confirmation sampling.

29. OU4 Remedial Action

a. Within 30 days after the approval of the final design submittal, Weyerhaeuser shall submit to EPA a work plan for the performance of the OU4 Remedial Action (“OU4 Remedial Action Work Plan”). The OU4 Remedial Action Work Plan shall provide for construction and implementation of the remedy set forth in the OU4 ROD and achievement of the OU4 Performance Standards, in accordance with this Consent Decree, the OU4 ROD, the OU4 SOW, and the design plans and specifications developed in accordance with the OU4 Remedial Design Work Plan and

approved by EPA. Upon its approval by EPA, the OU4 Remedial Action Work Plan shall be incorporated into and become enforceable under this Consent Decree. At the same time as it submits the OU4 Remedial Action Work Plan, Weyerhaeuser shall submit to EPA an amendment to the existing Health and Safety Plan that addresses field activities required by the OU4 Remedial Action Work Plan and which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120.

b. The OU4 Remedial Action Work Plan shall include the following: (1) a schedule for completion of the OU4 Remedial Action; (2) a schedule for developing and submitting other required OU4 Remedial Action plans; (3) a Performance Standards Verification Plan, which shall include a groundwater monitoring plan; (4) methods for satisfying permitting requirements; (5) a methodology for implementation of the OU4 Operation and Maintenance Plan; (6) a methodology for implementation of the Contingency Plan; (7) a Construction Quality Assurance Plan; and (8) procedures and plans for the decontamination of equipment and the disposal of contaminated materials. The OU4 Remedial Action Work Plan also shall include the methodology for implementation of the Construction Quality Assurance Plan and a schedule for implementation of all OU4 Remedial Action tasks identified in the final design submittal, and shall identify the initial formulation of Weyerhaeuser's OU4 Remedial Action project team (including, but not limited to, the OU4 Supervising Contractor).

c. Upon approval of the OU4 Remedial Action Work Plan by EPA, after a reasonable opportunity for review and comment by MDEQ, Weyerhaeuser shall implement the activities required under the OU4 Remedial Action Work Plan. Weyerhaeuser shall submit to EPA all plans, submittals, or other deliverables required under the approved OU4 Remedial Action Work Plan in accordance with the approved schedule for review and approval pursuant to Section XIII

(Approval of Plans and Other Submissions). Unless otherwise directed or approved by EPA, Weyerhaeuser shall not commence physical OU4 Remedial Action activities at the Site prior to approval of the OU4 Remedial Action Work Plan.

30. Duration of the OU4 Remedial Action and OU4 Operation and Maintenance.

Weyerhaeuser shall continue to implement the OU4 Remedial Action and OU4 O & M until the OU4 Performance Standards are achieved and for so long thereafter as is otherwise required under this Consent Decree.

31. Modification of the OU4 SOW and Related Work Plans

a. If EPA determines that modification to the work specified in the OU4 SOW and/or in work plans developed pursuant to the OU4 SOW is necessary to achieve and maintain the OU4 Performance Standards or to carry out and maintain the effectiveness of the remedy set forth in the OU4 ROD, EPA may require that such modification be incorporated in the OU4 SOW and/or such work plans, provided, however, that a modification may only be required pursuant to this Paragraph to the extent that it is consistent with the scope of the remedy selected in the OU4 ROD.

b. For the purposes of this Paragraph 31 and Paragraph 65 only, the "scope of the remedy selected in the OU4 ROD" is set forth in Appendix I ("Record of Decision for the 12th Street Landfill Operable Unit dated September 28, 2001") which is incorporated herein.

c. If Weyerhaeuser objects to any modification determined by EPA to be necessary pursuant to this Paragraph, it may seek dispute resolution pursuant to Section XXII (Dispute Resolution), Paragraph 84 (Record Review). The OU4 SOW and/or related work plans shall be modified in accordance with final resolution of the dispute.

d. Weyerhaeuser shall implement any work required by any modifications incorporated in the OU4 SOW and/or in work plans developed pursuant to the OU4 SOW in

accordance with this Paragraph.

e. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions as otherwise provided in this Consent Decree.

32. Weyerhaeuser acknowledges and agrees that nothing in this Consent Decree, the OU4 SOW, the OU4 Remedial Design, or the OU4 Remedial Action Work Plan constitutes a warranty or representation of any kind by the United States that compliance with the work requirements set forth in the OU4 SOW and the OU4 Work Plans will achieve the OU4 Performance Standards.

33. Weyerhaeuser shall, prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator of such shipment of Waste Material. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. Weyerhaeuser shall include in the written notification the following information, where available: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Weyerhaeuser shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state will be determined by Weyerhaeuser following the award of the contract for Remedial Action construction. Weyerhaeuser shall provide the information required by this Paragraph as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

34. OU4 Remedy Review

a. Periodic Review. Weyerhaeuser shall conduct any studies and investigations as requested by EPA, in order to permit EPA to conduct reviews of whether the OU4 Remedial Action is protective of human health and the environment. Weyerhaeuser shall conduct such studies at least every five years as required by Section 121(c) of CERCLA and any applicable regulations.

b. EPA Selection of Further OU4 Response Actions. In accordance with CERCLA, if EPA determines, at any time, that the OU4 Remedial Action is not protective of human health and the environment, EPA may select further response actions for OU4 in accordance with the requirements of CERCLA and the NCP.

c. Opportunity To Comment. Weyerhaeuser and, if required by Sections 113(k)(2), 117, or 121(f) of CERCLA, MDEQ and the public, will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the comment period.

d. Weyerhaeuser's Obligation To Perform Further OU4 Response Actions. If EPA selects further response actions for OU4, Weyerhaeuser shall perform such further response actions to the extent that the reopener conditions in Paragraphs 102 and 103 (United States' reservations of liability based on unknown conditions or new information) are satisfied. Upon selection of any such further remedial response actions (after the opportunity to comment described in Paragraph 34.c), and if the reopener conditions in Paragraph 102 or Paragraph 103 are satisfied, EPA shall so notify Weyerhaeuser (with a copy to MDEQ) and shall provide Weyerhaeuser with a reasonable opportunity to perform such response actions as part of the OU4 Work pursuant to this Consent Decree. Weyerhaeuser may invoke the procedures set forth in Section XXII (Dispute

Resolution) to dispute (1) EPA's determination that the reopener conditions of Paragraphs 102 and 103 (United States' reservations of liability based on unknown conditions or new information) are satisfied, (2) EPA's determination that the OU4 Remedial Action is not protective of human health and the environment, or (3) EPA's selection of further response actions. Disputes pertaining to whether the OU4 Remedial Action is protective or to EPA's selection of further response actions shall be resolved pursuant to Paragraph 84 (Record Review).

e. Submissions of Plans. If Weyerhaeuser is required to perform further response actions pursuant to Paragraph 34.d, it shall submit a modification to the RA Work Plan for such work to EPA for approval in accordance with the procedures set forth in Section IX (Performance of OU4 Work) and shall implement the plan approved by EPA in accordance with the provisions of this Decree.

X. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

35. Weyerhaeuser shall use quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance and monitoring samples in accordance with "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operation," (EPA QA/R5) (EPA/240/B-01/003, March 2001); "Guidance for Quality Assurance Project Plans (QA/G5)" (EPA/600/R-98/018, February 1998), and subsequent amendments to such guidelines upon notification by EPA to Weyerhaeuser of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. Prior to the commencement of any monitoring project under this Consent Decree, Weyerhaeuser shall submit to EPA for approval, after a reasonable opportunity for review and comment by MDEQ, a Quality Assurance Project Plan ("QAPP") that is consistent with the Mill SOW and the OU4 SOW, the NCP and applicable guidance documents. If relevant to the proceeding, the Parties agree that validated sampling data

generated in accordance with the QAPP(s) and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. Weyerhaeuser shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by Weyerhaeuser in implementing this Consent Decree. In addition, Weyerhaeuser shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring. Weyerhaeuser shall ensure that the laboratories it utilizes for the analysis of samples taken pursuant to this Decree perform all analyses according to accepted EPA methods. Accepted EPA methods consist of those methods which are documented in the "Contract Lab Program Statement of Work for Inorganic Analysis" and the "Contract Lab Program Statement of Work for Organic Analysis," dated February 1988, and any amendments made thereto during the course of the implementation of this Decree; however, upon approval by EPA, after opportunity for review and comment by MDEQ, Weyerhaeuser may use other analytical methods which are as stringent as or more stringent than the CLP-approved methods. Weyerhaeuser shall ensure that all laboratories it uses for analysis of samples taken pursuant to this Consent Decree participate in an EPA or EPA-equivalent QA/QC program. Weyerhaeuser shall use laboratories that have a documented Quality System which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-1, March 2001) or equivalent documentation as determined by EPA, EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program(NELAP) as meeting the Quality System requirements. Weyerhaeuser shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Consent Decree will be conducted in accordance with the

procedures set forth in the QAPP approved by EPA.

36. Upon request, Weyerhaeuser shall allow split or duplicate samples to be taken by EPA or its authorized representatives. Weyerhaeuser shall notify EPA not less than 21 days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Weyerhaeuser to take split or duplicate samples of any samples it takes as part of the Plaintiff's oversight of Weyerhaeuser's implementation of the Work.

37. Weyerhaeuser shall submit to EPA and to MDEQ two copies (unless otherwise directed by EPA) of the results of all sampling and/or tests or other data obtained or generated by or on behalf of Weyerhaeuser with respect to the Site and/or the implementation of this Consent Decree unless EPA agrees otherwise.

38. Notwithstanding any provision of this Consent Decree, the United States hereby retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA and any other applicable statutes or regulations.

XI. ACCESS AND INSTITUTIONAL CONTROLS

39. If any portion of the Site, or any other property where access and/or land/water use restrictions are needed to implement this Consent Decree, is owned or controlled by persons other than Weyerhaeuser, Weyerhaeuser shall use best efforts to secure from such persons:

a. an agreement to provide access thereto for Weyerhaeuser, as well as for the United States on behalf of EPA, and the State, as well as their representatives (including contractors), for the purpose of conducting any activity related to this Consent Decree;

b. an agreement, enforceable by Weyerhaeuser and the United States, to refrain from using the Site, or such other property, in any manner that would interfere with or adversely

affect the implementation, integrity, or protectiveness of the remedial measures to be performed pursuant to this Consent Decree; and

c. if EPA requests, the execution and recording with the Allegan County Register of Deeds an easement, running with the land, that grants a right of access for the purpose of conducting any activity related to this Consent Decree. The access rights shall be granted to (i) the United States, on behalf of EPA, and its representatives, (ii) the State and its representatives, and (iii) Weyerhaeuser and its representatives. Within 45 days of EPA's request, Weyerhaeuser shall submit to EPA for review and approval with respect to such property:

(1) a draft easement, in substantially the form attached hereto as Appendix F, enforceable under the laws of the State of Michigan, and

(2) a current title insurance commitment, or some other evidence of title acceptable to EPA, which shows title to the land described in the easement to be free and clear of all prior liens and encumbrances (except when those liens or encumbrances are approved by EPA or when, despite best efforts (not to include payment or satisfaction by Weyerhaeuser of any underlying claims or debts), Weyerhaeuser is unable to obtain release or subordination of such prior liens or encumbrances).

40. Within 15 days of EPA's approval and acceptance of any draft easement or title evidence required under Paragraph 39.c(2), Weyerhaeuser shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment to affect the title adversely, the easement shall be recorded with the Allegan County Register of Deeds. Within 30 days of the recording of the easement, Weyerhaeuser shall provide EPA with a final title insurance policy, or other final evidence of title acceptable to EPA, and a certified copy of the original recorded easement showing the clerk's recording stamps. If an easement is to be conveyed to the United

States, the easement and title evidence (including final title evidence) shall be prepared in accordance with the U.S. Department of Justice Title Standards 2001, and approval of the sufficiency of title must be obtained as required by 40 U.S.C. § 3111.

41. For purposes of Paragraph 39 of this Consent Decree, “best efforts” includes the payment of reasonable sums of money in consideration of access, access easements, land/water use restrictions, restrictive easements, and/or an agreement to release or subordinate a prior lien or encumbrance, but does not include payment or satisfaction by Weyerhaeuser of any underlying claims or debts. If (a) any access agreement required by Paragraph 39 of this Consent Decree is not obtained within 45 days of the date of entry of this Consent Decree, (b) any access easements required by Paragraph 39.c of this Consent Decree are not submitted to EPA in draft form within 45 days of the date of EPA’s request, or (c) Weyerhaeuser is unable to obtain an agreement pursuant to Paragraph 39 from the holder of a prior lien or encumbrance to release or subordinate such lien or encumbrance to any easement being created pursuant to this Consent Decree within 45 days of the date of entry of this Consent Decree, Weyerhaeuser shall promptly notify the United States in writing, and shall include in that notification a summary of the steps that Weyerhaeuser has taken to attempt to comply with Paragraph 39 of this Consent Decree. The United States may, as it deems appropriate, assist Weyerhaeuser in obtaining access or land/water use restrictions, either in the form of contractual agreements or in the form of easements running with the land, or in obtaining the release or subordination of a prior lien or encumbrance. Weyerhaeuser shall reimburse the United States in accordance with the procedures in Section XVIII (Payments by Weyerhaeuser), for all costs incurred, direct or indirect, by the United States in obtaining such access, land/water use restrictions, and/or the release/subordination of prior liens or encumbrances including, but not limited to, the cost of attorney time and the amount of monetary consideration paid or just compensation.

42. If EPA determines that land/water use restrictions in the form of State or local laws, regulations, ordinances or other governmental controls are needed to implement the remedy selected in the OU4 ROD or the Mill ROD, ensure the integrity and protectiveness thereof, or ensure non-interference therewith, Weyerhaeuser shall cooperate with EPA's efforts to secure such governmental controls.

43. Notwithstanding any provision of this Consent Decree, the United States retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statute or regulations.

XII. REPORTING REQUIREMENTS

44. In addition to any other requirement of this Consent Decree, unless required on a less frequent basis by EPA, Weyerhaeuser shall submit to EPA and MDEQ three copies of written monthly progress reports during construction and quarterly reports during other activities that:

- (a) describe the actions which have been taken toward achieving compliance with this Consent Decree during the previous period;
- (b) include a summary of all results of sampling and tests and all other data received or generated by Weyerhaeuser or its contractors or agents in the previous period;
- (c) identify all work plans, plans and other deliverables required by this Consent Decree completed and submitted during the previous period;
- (d) describe all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next six to twelve weeks and provide other information relating to the progress of construction, including, but not limited to, critical path diagrams, Gantt charts and Pert charts;
- (e) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated

delays; (f) include any modifications to the work plans or other schedules that Weyerhaeuser has proposed to EPA or that have been approved by EPA; and (g) describe all activities undertaken in support of the Community Relations Plan during the previous period and those to be undertaken in the next six to twelve weeks. Weyerhaeuser shall submit these progress reports to EPA and MDEQ by the tenth day of the end of the reporting period following the lodging of this Consent Decree until EPA notifies Weyerhaeuser pursuant to Paragraphs 64 or 66 of Section XV (Certifications of Completion), whichever comes later, unless EPA determines otherwise. If requested by EPA, Weyerhaeuser shall also provide briefings for EPA to discuss the progress of the Work.

45. Weyerhaeuser shall notify EPA of any change in the schedule described in the progress report for the performance of any activity, including, but not limited to, data collection and implementation of work plans, no later than seven days prior to the performance of the activity.

46. Upon the occurrence of any event during performance of the Work that Weyerhaeuser is required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), Weyerhaeuser shall within 24 hours of the onset of such event orally notify the EPA Project Coordinator or the Alternate EPA Project Coordinator (in the event of the unavailability of the EPA Project Coordinator), or, in the event that neither the EPA Project Coordinator or Alternate EPA Project Coordinator is available, the Emergency Response Section, Region 5, United States Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

47. Within 20 days of the onset of such an event, Weyerhaeuser shall furnish to the United States a written report, signed by Weyerhaeuser's Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within 30 days of the conclusion of such an event, Weyerhaeuser shall submit a report setting forth all actions taken in

response thereto.

48. Schedules and Submissions

a. All schedules required to be submitted under this Consent Decree shall include information regarding the timing, initiation, and completion of all major milestones for each activity and/or deliverable, including the review and approval of deliverables by EPA. With regard to the due date for revised plans, reports, or other submissions prepared pursuant to Section XIII, the schedules shall reflect that such revised submissions are due within a specified number of days of Weyerhaeuser's receipt of EPA's comments on the submission.

b. Weyerhaeuser shall submit three copies of all plans, reports, and data required by the OU4 SOW, the Mill SOW, the OU4 Remedial Design Work Plan, the Mill Remedial Design Work Plan, the OU4 Remedial Action Work Plan, the Mill Remedial Action Work Plan, or any other approved plans to EPA in accordance with the schedules set forth in such plans. Submissions by Weyerhaeuser shall be deemed to be received as of the date of receipt by EPA, as provided in Paragraph 128, and EPA shall use the date of receipt to determine whether Weyerhaeuser has complied with the schedules set forth in this Consent Decree. Weyerhaeuser shall simultaneously submit two copies of all such plans, reports and data to MDEQ. Upon request by EPA Weyerhaeuser shall submit in electronic form all portions of any report or other deliverable Weyerhaeuser is required to submit pursuant to the provisions of this Consent Decree.

49. All reports and other documents submitted by Weyerhaeuser to EPA (other than the progress reports referred to above) which purport to document Weyerhaeuser's compliance with the terms of this Consent Decree shall be signed by a legally authorized representative or agent of Weyerhaeuser.

XIII. APPROVAL OF PLANS AND OTHER SUBMISSIONS

50. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA, after reasonable opportunity for review and comment by MDEQ, shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Weyerhaeuser modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Weyerhaeuser at least one notice of deficiency and an opportunity to cure within 30 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects and the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

51. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 50(a), (b), or (c), Weyerhaeuser shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA subject only to its right to invoke the Dispute Resolution procedures set forth in Section XXII (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 50(c) and the submission has a material defect, EPA retains its right to seek stipulated penalties, as provided in Section XXIII (Stipulated Penalties).

52. Resubmission of Plans

a. Upon receipt of a notice of disapproval pursuant to Paragraph 50(d), Weyerhaeuser shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item as "Final" for approval. Any stipulated penalties applicable to the submission, as provided in Section XXIII (Stipulated Penalties), shall

accrue during the 30-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 53 and 54.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 50(d), Weyerhaeuser shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Weyerhaeuser of any liability for stipulated penalties under Section XXIII (Stipulated Penalties).

53. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require Weyerhaeuser to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to modify or develop the plan, report or other item. Weyerhaeuser shall implement any such plan, report, or item as modified or developed by EPA, subject only to its right to invoke the procedures set forth in Section XXII (Dispute Resolution).

54. If upon resubmission, a plan, report, or item is disapproved or modified by EPA due to a material defect, Weyerhaeuser shall be deemed to have failed to submit such plan, report, or item timely and adequately unless Weyerhaeuser invokes the dispute resolution procedures set forth in Section XXII (Dispute Resolution) and EPA's action is overturned pursuant to that Section. The provisions of Section XXII (Dispute Resolution) and Section XXIII (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XXIII (Stipulated Penalties).

55. All plans, reports, and other items required to be submitted to EPA under this Consent Decree shall, upon approval or modification by EPA, be enforceable under this Consent Decree. In the event EPA approves or modifies a portion of a plan, report, or other item required to be submitted to EPA under this Consent Decree, the approved or modified portion shall be enforceable under this Consent Decree.

XIV. PROJECT COORDINATORS

56. Within 20 days of lodging this Consent Decree, Weyerhaeuser and EPA will notify each other, in writing, of the name, address and telephone number of their respective designated Project Coordinators and Alternate Project Coordinators. If a Project Coordinator or Alternate Project Coordinator initially designated is changed, the identity of the successor will be given to the other Party at least 5 working days before the changes occur, unless impracticable, but in no event later than the actual day the change is made. Weyerhaeuser's Project Coordinator shall be subject to disapproval by EPA and shall have the technical expertise sufficient to adequately oversee all aspects of the Work. Weyerhaeuser's Project Coordinator shall not be an attorney for Weyerhaeuser in this matter. He or she may assign other representatives, including other contractors, to serve as Site representatives for oversight of performance of daily operations during remedial activities at OU4 and the Mill.

57. The United States may designate other representatives, including, but not limited to, EPA employees, and federal contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent Decree. EPA's Project Coordinator and Alternate Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and an On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. In

addition, EPA's Project Coordinator or Alternate Project Coordinator shall have authority, consistent with the National Contingency Plan, to halt any Work required by this Consent Decree and to take any necessary response action when s/he determines that conditions at the Site constitute an emergency situation or may present an immediate threat to public health or welfare or the environment due to release or threatened release of Waste Material.

58. EPA's Project Coordinator and Weyerhaeuser's Project Coordinator will meet in person or via conference call, at a minimum, on a bi-monthly basis, unless EPA's Project Coordinator and Weyerhaeuser's Project Coordinator mutually agree to meet on a greater or less frequent basis.

XV. ASSURANCE OF ABILITY TO COMPLETE WORK

59. Financial Assurance for the Mill Work and OU4 Work. Exactly \$6.2 million of the monies paid to EPA by Weyerhaeuser pursuant to Paragraph 69 (Initial Payments to United States) shall serve as Weyerhaeuser's financial assurance of its ability to perform the OU4 Work, Mill RI/FS, and Mill Work required under this Consent Decree.

60. If at any time EPA determines that the financial assurances provided by Weyerhaeuser are inadequate to fund the OU4 Work, Mill RI/FS, and Mill Work required under this Consent Decree, Weyerhaeuser shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval additional financial assurance.

61. Additional financial assurance may be in one or more of the following forms:

- a. a surety bond guaranteeing performance of the Work;
- b. one or more irrevocable letters of credit equaling the amount specified above and in favor of EPA;
- c. a trust fund;

d. a guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with Weyerhaeuser, and such third party satisfies the requirements of 40 C.F.R. Part 264.143(f); and

e. a demonstration that Weyerhaeuser satisfies the requirements of 40 C.F.R. Part 264.143(f).

Weyerhaeuser's inability to demonstrate financial ability to complete the Work shall not excuse performance of any of Weyerhaeuser's obligations under this Consent Decree.

62. Weyerhaeuser may change the form of any additional financial assurance provided under Paragraph 61 at any time, upon notice to and approval by EPA, provided that the new form of assurance meets the requirements of Paragraph 61. In the event of a dispute, Weyerhaeuser may change the form of the financial assurance only in accordance with the final administrative or judicial decision resolving the dispute.

XVI. CERTIFICATIONS OF COMPLETION

63. Construction of the Mill Remedial Action

a. Within 90 days after Weyerhaeuser concludes that all phases of the construction of the Mill Remedial Action (excluding Mill O & M), have been fully performed and the applicable Mill Performance Standards (as defined in the approved Mill RA Work Plan and Performance Standard Verification Plan) have been attained, Weyerhaeuser shall schedule and conduct a pre-certification inspection to be attended by Weyerhaeuser, EPA, and MDEQ. If, after the pre-certification inspection, Weyerhaeuser still believes that the Mill Work has been fully performed and the applicable Mill Performance Standards have been attained, Weyerhaeuser shall submit a written report requesting certification to EPA for approval, with a copy to MDEQ, pursuant to Section XIII (Approval of Plans and Other Submissions), within 30 days of the inspection. In the

report, a registered professional engineer and Weyerhaeuser's Project Coordinator shall state that the construction of the Mill Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by a responsible corporate official of Weyerhaeuser or Weyerhaeuser's Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity to review and comment by MDEQ, determines that any portion of the Mill Remedial Action has not been completed in accordance with this Consent Decree or that the applicable Mill Performance Standards have not been achieved, EPA will notify Weyerhaeuser in writing of the activities that must be undertaken by Weyerhaeuser pursuant to this Consent Decree to complete the Mill Remedial Action and achieve the Mill Performance Standards, provided, however, that EPA may only require Weyerhaeuser to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the scope of the remedy selected in the Mill ROD and not including operation, monitoring, and maintenance. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the Mill SOW or require Weyerhaeuser to submit a schedule to EPA for approval pursuant to Section XIII (Approval of Plans and Other Submissions), with a copy to MDEQ. Weyerhaeuser shall perform all activities described in the notice in accordance with the specifications and schedules established

therein, subject to its right to invoke the dispute resolution procedures set forth in Section XXII (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent request for Certification of Completion by Weyerhaeuser and after a reasonable opportunity for review and comment by MDEQ, that the Mill Remedial Action has been constructed in accordance with this Consent Decree and the applicable Mill Performance Standards have been achieved, EPA will so notify Weyerhaeuser in writing. This certification shall constitute the Certification of Completion of the construction of the Mill Remedial Action for purposes of this Consent Decree, including, but not limited to, Section XXIV (Covenant Not to Sue by the United States). Certification of Completion of the construction of the Mill Remedial Action shall not affect Weyerhaeuser's other obligations under this Consent Decree (including Weyerhaeuser's obligation to conduct O&M pursuant to the Mill ROD).

64. Completion of the Mill Work

a. Within 90 days after Weyerhaeuser concludes that all phases of the Mill Work (including Mill O & M), have been fully performed, Weyerhaeuser shall schedule and conduct a pre-certification inspection to be attended by Weyerhaeuser, EPA, and MDEQ. If, after the pre-certification inspection, Weyerhaeuser still believes that the Mill Work has been fully performed, Weyerhaeuser shall submit a written report by a registered professional engineer stating that the Mill Work has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by a responsible corporate official of Weyerhaeuser or Weyerhaeuser's Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and

complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after review of the written report, EPA, after reasonable opportunity to review and comment by MDEQ, determines that any portion of the Mill Work has not been completed in accordance with this Consent Decree, EPA will notify Weyerhaeuser in writing of the activities that must be undertaken by Weyerhaeuser pursuant to this Consent Decree to complete the Mill Work, provided, however, that EPA may only require Weyerhaeuser to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the scope of the remedy selected in the Mill ROD. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the Mill SOW or require Weyerhaeuser to submit a schedule to EPA for approval pursuant to Section XIII (Approval of Plans and Other Submissions). Weyerhaeuser shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to its right to invoke the dispute resolution procedures set forth in Section XXII (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent request for Certification of Completion by Weyerhaeuser and after a reasonable opportunity for review and comment by MDEQ, that the Mill Work has been performed in accordance with this Consent Decree, EPA will so notify Weyerhaeuser in writing.

65. Construction of the OU4 Remedial Action

a. Within 90 days after Weyerhaeuser concludes that all phases of the OU4 Remedial Action (excluding OU4 O & M), have been fully performed and the OU4 Performance Standards (as defined in the approved RA and Performance Standard Verification Plan) have been

attained, Weyerhaeuser shall schedule and conduct a pre-certification inspection to be attended by Weyerhaeuser, EPA, and MDEQ. If, after the pre-certification inspection, Weyerhaeuser still believes that the OU4 Remedial Action has been fully performed and the applicable OU4 Performance Standards have been attained, Weyerhaeuser shall submit a written report requesting certification to EPA for approval, with a copy to MDEQ, pursuant to Section XIII (Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, a registered professional engineer and Weyerhaeuser's Project Coordinator shall state that the construction of the OU4 Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by a responsible corporate official of Weyerhaeuser or Weyerhaeuser's Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity for review and comment by MDEQ, determines that any portion of the OU4 Remedial Action has not been completed in accordance with this Consent Decree or that the applicable OU4 Performance Standards have not been achieved, EPA will notify Weyerhaeuser in writing of the activities that must be undertaken by Weyerhaeuser pursuant to this Consent Decree to complete the OU4 Remedial Action and achieve the OU4 Performance Standards, provided, however, that EPA may only require Weyerhaeuser to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the scope of the remedy selected in

the OU4 ROD and not including operation, monitoring, and maintenance. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the OU4 SOW or require Weyerhaeuser to submit a schedule to EPA for approval pursuant to Section XIII (EPA Approval of Plans and Other Submissions), with a copy to MDEQ. Weyerhaeuser shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to its right to invoke the dispute resolution procedures set forth in Section XXII (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent request for Certification of Completion by Weyerhaeuser and after a reasonable opportunity for review and comment by MDEQ, that the OU4 Remedial Action has been performed in accordance with this Consent Decree and the applicable OU4 Performance Standards have been achieved, EPA will so notify Weyerhaeuser in writing. This certification shall constitute the Certification of Completion of the construction of the OU4 Remedial Action for purposes of this Consent Decree, including, but not limited to, Section XXIV (Covenant Not to Sue by the United States). Certification of Completion of the construction of the OU4 Remedial Action shall not affect Weyerhaeuser's other obligations under this Consent Decree.

66. Completion of the OU4 Work

a. Within 90 days after Weyerhaeuser concludes that all phases of the OU4 Work (including OU4 O & M), have been fully performed, Weyerhaeuser shall schedule and conduct a pre-certification inspection to be attended by Weyerhaeuser, EPA, and MDEQ. If, after the pre-certification inspection, Weyerhaeuser still believes that the OU4 Work has been fully performed, Weyerhaeuser shall submit a written report by a registered professional engineer stating that the OU4 Work has been completed in full satisfaction of the requirements of this Consent Decree. The report

shall contain the following statement, signed by a responsible corporate official of Weyerhaeuser or Weyerhaeuser's Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after review of the written report, EPA, after reasonable opportunity to review and comment by MDEQ, determines that any portion of the OU4 Work has not been completed in accordance with this Consent Decree, EPA will notify Weyerhaeuser in writing of the activities that must be undertaken by Weyerhaeuser pursuant to this Consent Decree to complete the OU4 Work, provided, however, that EPA may only require Weyerhaeuser to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the scope of the remedy selected in the OU4 ROD. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the OU4 SOW or require Weyerhaeuser to submit a schedule to EPA for approval pursuant to Section XIII (Approval of Plans and Other Submissions). Weyerhaeuser shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to its right to invoke the dispute resolution procedures set forth in Section XXII (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent request for Certification of Completion by Weyerhaeuser and after a reasonable opportunity for review and comment by MDEQ, that the OU4 Work has been performed in accordance with this Consent Decree, EPA will so notify Weyerhaeuser in writing.

XVII. EMERGENCY RESPONSE

67. In the event of any action or occurrence during the performance of the Work which causes or threatens a release of Waste Material from the Mill or OU4 that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Weyerhaeuser shall, subject to Paragraph 68, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify the EPA Project Coordinator, or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, Weyerhaeuser shall notify the EPA Emergency Response Unit, Region 5. Weyerhaeuser shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plans, the Contingency Plans, and any other applicable plans or documents developed pursuant to the Mill SOW or the OU4 SOW, whichever is relevant. In the event that Weyerhaeuser fails to take appropriate response action as required by this Section, and EPA takes such action instead, Weyerhaeuser shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payments by Weyerhaeuser).

68. Nothing in the preceding Paragraph or in this Consent Decree shall be deemed to limit any authority of the United States or the State (a) to take all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Mill or OU4, or (b) to direct or order such action, or seek an order from the Court, to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Mill or OU4, subject to Section XXIV (Covenant Not to Sue by United States).

XVIII. PAYMENTS BY WEYERHAEUSER

69. Initial Payments to United States

a. Within fifteen (15) business days after this Consent Decree has been lodged, Weyerhaeuser will deposit \$6,338,851.53 into an escrow account bearing interest at a commercially reasonable rate, in a federally-chartered bank (the "Escrow Account"). Weyerhaeuser shall bear any costs associated with the creation or maintenance of the Escrow Account. If the Consent Decree is disapproved by the Court, and the time for an appeal of that decision has run or if the Court's denial of entry is upheld on appeal, or if the United States withdraws or withholds its consent to the Consent Decree pursuant to Paragraph 136, the monies placed in the Escrow Account, together with accrued interest thereon, will be returned to Weyerhaeuser. If the Consent Decree is approved by the Court with the consent of the United States, and, pursuant to Paragraph 11, EPA notifies Weyerhaeuser that the Allied Paper, Inc./Portage Creek/Kalamazoo River Special Account has been fully funded, then Weyerhaeuser shall pay to EPA the funds in the Escrow Account, including the interest accrued.

b. Exactly \$138,851.53 of the monies paid to EPA pursuant to this Paragraph will be used to reimburse EPA for Past Response Costs. These funds may, in the sole discretion of EPA, be directed to the Allied Paper, Inc./Portage Creek/Kalamazoo River Special Account within the EPA Hazardous Substance Superfund or into any other special account created for response actions at the Site, or may be transferred by EPA into the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site.

c. All remaining funds (including interest) paid to EPA pursuant to this Paragraph 69 shall be directed to the Kalamazoo River Special Account within the EPA Hazardous Substance Superfund. Upon funding of the Kalamazoo River Special Account, EPA shall draw upon

such funds solely to conduct or finance response actions at or in connection with the Kalamazoo River Operable Unit, first and until such time as said funds (excluding interest) have been depleted or such response actions have been completed. Upon completion of response actions at the Kalamazoo River Operable Unit, any funds remaining in the Kalamazoo River Special Account may be transferred by EPA into the EPA Hazardous Substance Superfund or into any other special account created for response actions at the Site, in the sole discretion of EPA. Upon written request by Weyerhaeuser which shall be made no more than once a year, EPA shall provide to Weyerhaeuser an itemized summary of expenditures of funds from the Kalamazoo River Special Account for the previous year.

d. Payment under this Paragraph 69 will be made by FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice account in accordance with current EFT procedures, referencing the USAO File Number, EPA Site/Spill ID 059B, DOJ Case Number 90-11-2-13702/2, and the title and docket number of this civil action. Payment will be made in accordance with instructions provided to Weyerhaeuser by the Financial Litigation Unit of the United States Attorney’s Office for the Western District of Michigan (Southern Division) following lodging of this Consent Decree. Any payments received by the Department of Justice after 4:00 p.m. (Eastern Time) will be credited on the next business day.

e. At the time of payment, Weyerhaeuser shall send notice that payment has been made to the United States, EPA, and the Regional Financial Management Officer.

70. Payment of Specified Future Response Costs at Mill and OU4

a. Weyerhaeuser shall pay all Specified Future Response Costs not inconsistent with the National Contingency Plan. On a periodic basis EPA will send Weyerhaeuser a bill requiring payment that includes an itemized cost summary, which reflects direct and indirect costs

incurred by EPA, and a DOJ cost summary which reflects costs incurred by DOJ, if any. Weyerhaeuser shall make all payments within 30 days of Weyerhaeuser's receipt of each bill requiring payment, except as otherwise provided in Paragraph 71. Weyerhaeuser shall make all payments required by this Paragraph by certified or cashier's check or by Electronic Wire Transfer. Payments made by check shall be made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making the payment, EPA Site/Spill ID Number 059B, and DOJ Case Number 90-11-2-13702/2. Payment by check shall be sent to: Environmental Protection Agency, Region 5, P.O. Box 70753, Chicago, Illinois 60673 (Attn: Superfund Accounting). Payment by Electronic Wire Transfer shall be sent to EPA's Region 5 lockbox bank, referencing: the name and address of Weyerhaeuser; the Site name; the Mill and OU4; the Site/Spill ID Number 059B; and the EPA docket number for this matter. Payment by wire shall be made in accordance with instructions provided to Weyerhaeuser by EPA after the Effective Date. Payments received via Electronic Funds Transfer at the Region 5 lockbox bank after 11:00 AM (Central Time) will be credited on the next business day.

b. At the time of payment, Weyerhaeuser shall send notice that payment has been made to the United States, to EPA and to the Regional Financial Management Officer, in accordance with Section XXIX (Notices and Submissions).

c. All payments received by EPA under Subparagraph 70.a shall be deposited in the Allied Paper, Inc./Portage Creek/Kalamazoo River Special Account or in the Kalamazoo River Special Account within the EPA Hazardous Substance Superfund and shall be retained and used to conduct or finance past and future response actions at or in connection with the Site, or shall be transferred by EPA to the EPA Hazardous Substance Superfund, at the sole discretion of EPA.

71. Disputes Regarding Specified Future Response Costs. Weyerhaeuser may contest

payment of any Specified Future Response Costs under Paragraph 70 if it determines that the United States has made an accounting error or if it alleges that a cost item that is included represents costs that are inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the United States pursuant to Section XXIX (Notices and Submissions). Any such objection shall specifically identify the contested Specified Future Response Costs and the basis for objection. In the event of an objection, Weyerhaeuser shall within the 30 day period pay all uncontested Specified Future Response Costs to the United States in the manner described in Paragraph 70. Simultaneously, Weyerhaeuser shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State and remit to that escrow account funds equivalent to the amount of the contested Specified Future Response Costs. Weyerhaeuser shall send to the United States, as provided in Section XXIX (Notices and Submissions), a copy of the transmittal letter and check paying the uncontested Specified Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Weyerhaeuser shall initiate the Dispute Resolution procedures in Section XXII (Dispute Resolution). If the United States prevails in the dispute, within 5 days of the resolution of the dispute, Weyerhaeuser shall pay the sums due (with all accrued interest) to the United States in the manner described in Paragraph 70. If Weyerhaeuser prevails concerning any aspect of the contested costs, Weyerhaeuser shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to the United States in the manner described in Paragraph 70. Weyerhaeuser shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the

procedures set forth in Section XXII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Weyerhaeuser's obligation to reimburse the United States for its Specified Future Response Costs.

72. Interest on Untimely Payments. In the event that the payments required by Paragraph 69.a are not made within the required time frames or the payments required by Paragraph 70.a are not made within 30 days of Weyerhaeuser's receipt of the bill, Weyerhaeuser shall pay Interest on the unpaid balance. The Interest to be paid on Past Response Costs under this Paragraph shall begin to accrue on the Effective Date. The Interest on Specified Future Response Costs shall begin to accrue on the date of the bill. The Interest shall accrue through the date of Weyerhaeuser's payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to Plaintiffs by virtue of Weyerhaeuser's failure to make timely payments under this Section including, but not limited to, payment of stipulated penalties pursuant to Section XXIII (Stipulated Penalties). Weyerhaeuser shall pay Interest on payments required by Paragraphs 69 and 70 in accordance with the instructions set forth in those paragraphs.

XIX. CONSENT DECREE FUNDING

73. The Parties currently anticipate that the funds to be deposited in the Disbursement Special Account under this Consent Decree (excluding the interest earned on such deposits) will be sufficient to fund the completion of the Work. In the event those funds are not sufficient to fund the completion of the Work, the insufficiency shall not be considered a force majeure event or a change in circumstances or a basis for seeking non-consensual relief from this Consent Decree pursuant to Fed. R. Civ. P. 60(b), and Weyerhaeuser shall utilize its own funds to complete the Work as required under this Consent Decree.

XX. INDEMNIFICATION AND INSURANCE

74. Weyerhaeuser's Indemnification of the United States

a. The United States does not assume any liability by entering into this agreement or by virtue of any designation of Weyerhaeuser as EPA's authorized representative under Section 104(e) of CERCLA. Weyerhaeuser shall indemnify, save and hold harmless the United States and its officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action arising from, or are on account of, negligent or other wrongful acts or omissions of Weyerhaeuser, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Consent Decree, including, but not limited to, any claims arising from any designation of Weyerhaeuser as EPA's authorized representative under Section 104(e) of CERCLA. Further, Weyerhaeuser agrees to pay the United States all costs it incurs including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Weyerhaeuser's officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Consent Decree. The United States shall not be held out as a party to any contract entered into by or on behalf of Weyerhaeuser in carrying out activities pursuant to this Consent Decree. Neither Weyerhaeuser nor any such contractor shall be considered an agent of the United States.

b. The United States shall give Weyerhaeuser notice of any claim for which the United States plans to seek indemnification pursuant to Subparagraph 74.a, and shall consult with Weyerhaeuser prior to settling such claim.

c. No amount paid for indemnification or reimbursement to the United States

pursuant to Paragraphs 74 or 75 shall be considered a cost of performing the Mill RI/FS, Mill Work, or OU4 Work for purposes of Sections VII, VIII, or IX.

75. Weyerhaeuser waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Weyerhaeuser and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Weyerhaeuser shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Weyerhaeuser and any person for performance of the Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

76. No later than 15 days before commencing any on-Site Work, Weyerhaeuser shall secure, and shall maintain, until the first anniversary of EPA's Certification of Completion of the construction of the Mill Remedial Action or Certification of Completion of the construction of the OU4 Remedial Action, whichever is later, pursuant to Paragraphs 63 or 65 respectively of Section XVI (Certifications of Completion), comprehensive general liability insurance with limits of \$5 million dollars, combined single limit, and automobile liability insurance with limits of \$5 million dollars, combined single limit, naming the United States, on behalf of EPA, as an additional insured. In addition, for the duration of this Consent Decree, Weyerhaeuser shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Weyerhaeuser in furtherance of this Consent Decree. Prior to commencement of the Work under this Consent Decree, Weyerhaeuser shall provide to EPA certificates of such insurance and a copy of each

insurance policy. Weyerhaeuser shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. If Weyerhaeuser demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Weyerhaeuser needs to provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

XXI. FORCE MAJEURE

77. “Force majeure,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Weyerhaeuser, of any entity controlled by Weyerhaeuser, or of Weyerhaeuser's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Weyerhaeuser's best efforts to fulfill the obligation. The requirement that Weyerhaeuser exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. “Force Majeure” does not include financial inability to complete the Mill RI/FS work, Mill Work, or OU4 Work or a failure to attain the Mill Performance Standards or the OU4 Performance Standards.

78. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Weyerhaeuser shall notify orally EPA's Project Coordinator or, in his or her absence, EPA's Alternate Project Coordinator or, in the event both of EPA's designated representatives are unavailable, the Director of the Superfund Division, EPA Region 5, within 3 days of the time when Weyerhaeuser first knew that the event might cause a delay. Within 5 days thereafter, Weyerhaeuser shall provide in writing

to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Weyerhaeuser's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Weyerhaeuser, such event may cause or contribute to an endangerment to public health, welfare or the environment. Weyerhaeuser shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Weyerhaeuser from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Weyerhaeuser shall be deemed to know of any circumstance of which Weyerhaeuser, any entity controlled by Weyerhaeuser, or Weyerhaeuser's contractors knew or should have known.

79. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Weyerhaeuser in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Weyerhaeuser in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

80. If Weyerhaeuser elects to invoke the dispute resolution procedures set forth in Section XXII (Dispute Resolution) to dispute an EPA determination that a delay is not attributable to a force

majeure event, it shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Weyerhaeuser shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Weyerhaeuser complied with the requirements of Paragraphs 77 and 78, above. If Weyerhaeuser carries this burden, the delay at issue shall be deemed not to be a violation by Weyerhaeuser of the affected obligation of this Consent Decree identified to EPA and the Court.

XXII. DISPUTE RESOLUTION

81. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. The procedures set forth in this Section, however, shall not apply to actions by the United States to enforce obligations of Weyerhaeuser that have not been disputed in accordance with this Section.

82. Any dispute which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between the Parties. The period for informal negotiations shall not exceed 20 days from the time the dispute arises, unless it is modified by written agreement of the Parties. The dispute shall be considered to have arisen when one Party sends the other Party a written Notice of Dispute.

83. Statements of Position

a. In the event that the parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the position advanced by EPA shall be considered binding unless, within 5 days after the conclusion of the informal negotiation period, Weyerhaeuser invokes

the formal dispute resolution procedures of this Section by serving on the United States and EPA a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by Weyerhaeuser. The Statement of Position shall specify Weyerhaeuser's position as to whether formal dispute resolution should proceed under Paragraph 84 or Paragraph 85.

b. Within 14 days after receipt of Weyerhaeuser's Statement of Position, EPA will serve on Weyerhaeuser its Statement of Position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA. EPA's Statement of Position shall include a statement as to whether formal dispute resolution should proceed under Paragraph 84 or 85. Within 10 days after receipt of EPA's Statement of Position, Weyerhaeuser may submit a Reply.

c. If there is disagreement between EPA and Weyerhaeuser as to whether dispute resolution should proceed under Paragraph 84 or 85, the Parties shall follow the procedures set forth in the paragraph determined by EPA to be applicable. However, if Weyerhaeuser ultimately appeals to the Court to resolve the dispute, the Court shall determine which paragraph is applicable in accordance with the standards of applicability set forth in Paragraphs 84 and 85.

84. Record Review. Formal dispute resolution for disputes pertaining to the selection or adequacy of any response action and all other disputes that are accorded review on the administrative record under applicable principles of administrative law shall be conducted pursuant to the procedures set forth in this Paragraph. For purposes of this Paragraph, the adequacy of any response action includes, without limitation: (1) the adequacy or appropriateness of plans, procedures to implement plans, or any other items requiring approval by EPA under this Consent Decree; and (2) the adequacy of the performance of response actions taken pursuant to this Consent Decree. Nothing

in this Consent Decree shall be construed to allow any dispute by Weyerhaeuser regarding the validity of the Mill ROD's or OU4 ROD's provisions.

a. An administrative record of the dispute shall be maintained by EPA and shall contain all statements of position, including supporting documentation, submitted pursuant to this Section. Where appropriate, EPA may allow submission of supplemental statements of position by the Parties.

b. The Director of the Superfund Division, EPA Region 5, will issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 84.a. This decision shall be binding upon Weyerhaeuser, subject only to the right to seek judicial review pursuant to Paragraphs 84.c and d.

c. Any administrative decision made by EPA pursuant to Paragraph 84.b. shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by Weyerhaeuser with the Court and served on EPA and the United States within 10 days of receipt of EPA's decision. The motion shall include a description of the matter in dispute, the efforts made by the Parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Decree. The United States may file a response to Weyerhaeuser's motion.

d. In proceedings on any dispute governed by this Paragraph, Weyerhaeuser shall have the burden of demonstrating that the decision of the Superfund Division Director is arbitrary and capricious or otherwise not in accordance with law. Judicial review of EPA's decision shall be on the administrative record compiled pursuant to Paragraph 84.a.

85. Formal dispute resolution for disputes that neither pertain to the selection or adequacy of any response action nor are otherwise accorded review on the administrative record under

applicable principles of administrative law, shall be governed by this Paragraph.

a. Following receipt of Weyerhaeuser's Statement of Position submitted pursuant to Paragraph 83, the Director of the Superfund Division, EPA Region 5, will issue a final decision resolving the dispute. The Superfund Division Director's decision shall be binding on Weyerhaeuser unless, within 10 days of receipt of the decision, Weyerhaeuser files with the Court and serves on the United States and EPA a motion for judicial review of the decision setting forth the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree. The United States may file a response to Weyerhaeuser's motion.

b. Notwithstanding Paragraph J of Section I (Background) of this Consent Decree, judicial review of any dispute governed by this Paragraph shall be governed by applicable principles of law.

86. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone or affect in any way any obligation of Weyerhaeuser under this Consent Decree, not directly in dispute, unless EPA agrees otherwise or the Court so determines. Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 98. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that Weyerhaeuser does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XXIII (Stipulated Penalties).

XXIII. STIPULATED PENALTIES

87. Weyerhaeuser shall be liable for stipulated penalties in the amounts set forth in Paragraphs 88, 89, 90, 91, and 92 to the United States for failure to comply with the requirements

of this Consent Decree specified below, unless excused under Section XXI (Force Majeure). “Compliance” by Weyerhaeuser shall include completion of the activities under this Consent Decree or any work plan or other plan approved under this Consent Decree identified below in accordance with all applicable requirements of law, this Consent Decree, the Mill SOW, the OU4 SOW, and any plans or other documents approved by EPA pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree.

88. Stipulated Penalty Amounts - Failure to Make Payments. Weyerhaeuser shall be liable for stipulated penalties in the amounts set forth below for each day of violation in which Weyerhaeuser fails to make payments as required under Section XVIII of this Consent Decree:

Penalty Per Violation Per Day	Period of Noncompliance
\$1,500.00	1st through 14th day
\$3,000.00	15th through 30th day
\$5,000.00	31st day and beyond

89. Stipulated Penalty Amounts – Work

a. Weyerhaeuser shall be liable for the following stipulated penalties which shall accrue per violation per day for any noncompliance identified in Subparagraph 89.b:

Penalty Per Violation Per Day	Period of Noncompliance
\$1,500.00	1st through 14th day
\$3,000.00	15th through 30th day
\$5,000.00	31st day and beyond

b. Compliance Milestones

(1) Failure to submit and, if required by EPA, modify any and all draft and final Remedial Investigation and Feasibility Study Work Plans in accordance with the schedule and

requirements set forth in this Consent Decree;

(2) Failure to submit and, if required by EPA, modify any and all draft and final Remedial Investigation and Feasibility Study Reports in accordance with the schedule and requirements set forth in this Consent Decree;

(3) Failure to submit and, if required by EPA, modify any and all draft and final Remedial Design and Remedial Action Work Plans in accordance with the schedule and requirements set forth in this Consent Decree;

(4) Failure to submit and, if required by EPA, modify any significant deliverables as identified in the EPA approved Remedial Design and Remedial Action Work Plans in accordance with the schedule and requirements set forth in this Consent Decree;

(5) Failure to implement the approved Remedial Design and Remedial Action Work Plans in accordance with the schedule and requirements set forth in this Consent Decree;

(6) Failure to submit and, if required by EPA, modify Preliminary Pre-Final and Final Remedial Design and any significant deliverables as identified in the approved Final Remedial Design(s) in accordance with the schedule and requirements set forth in this Consent Decree;

(7) Failure to complete the Remedial Action(s) required under this Consent Decree, the Mill SOW and the OU4 SOW in accordance with the schedule and requirements set forth in those documents;

(8) Failure to submit and, if required by EPA, modify the reports required in Section XVI in accordance with the schedule and requirements set forth in this Consent Decree;

(9) Failure to submit and, if required by EPA, modify the O&M Plan and O&M Manual in accordance with the schedule and requirements set forth in this Consent Decree;

(10) Failure to perform further response actions and additional Work in accordance with the schedule and requirements set forth in Sections VII, VIII, IX, and X of this Consent Decree;

90. Stipulated Penalty Amount - Work Takeover

a. In the event that EPA assumes performance of a portion of or all of the Mill RI/FS pursuant to Paragraph 107 (Work Takeover), Weyerhaeuser shall be liable for a stipulated penalty in the amount of \$50,000.

b. In the event that EPA assumes performance of a portion of or all of the Mill Work pursuant to Paragraph 107 (Work Takeover), Weyerhaeuser shall be liable for a stipulated penalty in the amount of \$250,000.

c. In the event that EPA assumes performance of a portion of or all of the OU4 Work pursuant to Paragraph 107 (Work Takeover), Weyerhaeuser shall be liable for a stipulated penalty in the amount of \$250,000.

91. Stipulated Penalty Amounts – Other Work Reports and Submissions. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate other reports or other written documents pursuant to this Consent Decree:

Penalty Per Violation Per Day	Period of Noncompliance
\$1,000.00	1st through 14th day
\$2,000.00	15th through 30th day
\$3,000.00	31st day and beyond

92. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue (1)

with respect to a deficient submission under Section XIII (Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Weyerhaeuser of any deficiency; (2) with respect to a decision by the Director of the Superfund Division, EPA Region 5, under Paragraph 84.b or 85.a of Section XXII (Dispute Resolution), during the period, if any, beginning on the 21st day after the date that Weyerhaeuser's reply to EPA's Statement of Position is received until the date that the Director issues a final decision regarding such dispute; or (3) with respect to judicial review by this Court of any dispute under Section XXII (Dispute Resolution), during the period, if any, beginning on the 31st day after the Court's receipt of the final submission regarding the dispute until the date that the Court issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree.

93. Following EPA's determination that Weyerhaeuser has failed to comply with a requirement of this Consent Decree, EPA may give Weyerhaeuser written notification of the same and describe the noncompliance. EPA may send Weyerhaeuser a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Weyerhaeuser of a violation or demanded payment.

94. All penalties accruing under this Section shall be due and payable to the United States within 30 days of Weyerhaeuser's receipt from EPA of a demand for payment of the penalties, unless Weyerhaeuser invokes the Dispute Resolution procedures under Section XXII (Dispute Resolution). Weyerhaeuser shall make all payments required by this Paragraph by certified or cashier's check or by Electronic Wire Transfer. Payments made by check shall be made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making the payment, EPA Site/Spill ID Number 059B, and DOJ Case Number 90-11-2-13702/2. Payment by check shall be

sent to: Environmental Protection Agency, Region 5, P.O. Box 70753, Chicago, Illinois 60673 (Attn: Superfund Accounting). Payment by Electronic Wire Transfer shall be sent to EPA's Region 5 lockbox bank, referencing: the name and address of Weyerhaeuser; the Site name; the Mill and OU4; the Site/Spill ID Number 059B; and the EPA docket number for this matter. Payment by wire shall be made in accordance with instructions provided to Weyerhaeuser by EPA after the Effective Date. Payments received via Electronic Funds Transfer at the Region 5 lockbox bank after 11:00 AM (Central Time) will be credited on the next business day.

95. The payment of penalties shall not alter in any way Weyerhaeuser's obligation to complete the performance of the Mill RI/FS, Mill Work and the OU4 Work required under this Consent Decree.

96. No amount paid in stipulated penalties shall be considered a cost of performing the Mill RI/FS, Mill Work, or OU4 Work for purposes of Sections VII, VIII, or IX, nor shall such amount be reported in any cost summary submitted by Weyerhaeuser to EPA.

97. Penalties shall continue to accrue as provided in Paragraph 92 during any dispute resolution period, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to this Court, accrued penalties determined to be owing shall be paid to EPA within 15 days of the agreement or the receipt of EPA's decision or order;

b. If the dispute is appealed to this Court and the United States prevails in whole or in part, Weyerhaeuser shall pay all accrued penalties determined by the Court to be owed to EPA within 60 days of receipt of the Court's decision or order, except as provided in Subparagraph 97.c below; and

c. If the District Court's decision is appealed by any Party, Weyerhaeuser shall pay all accrued penalties determined by the District Court to be owing to the United States into an interest-bearing escrow account within 60 days of receipt of the Court's decision or order. Penalties shall be paid into this account as they continue to accrue, at least every 60 days. Within 15 days of receipt of the final appellate court decision, the escrow agent shall pay the balance of the account to EPA or to Weyerhaeuser to the extent that it prevails.

98. If Weyerhaeuser fails to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as Interest. Weyerhaeuser shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 94.

99. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States to seek any other remedies or sanctions available by virtue of Weyerhaeuser's violation of this Decree or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, provided, however, that the United States shall not seek civil penalties pursuant to Section 122(l) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of the Consent Decree.

100. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

XXIV. COVENANT NOT TO SUE BY UNITED STATES

101. General Scope of Covenant

a. As specified by the covenant not to sue contained in Subparagraph 101.b, and subject to the reservations contained in Paragraphs 102, 103, 106, and 108, this Consent Decree is intended to address Weyerhaeuser's alleged liability under Sections 106 and 107(a) of CERCLA for the Mill Work, the OU4 Work, Past Response Costs, and Specified Future Response Costs at OU4 and the Mill and not to address Weyerhaeuser's alleged liability with respect to any other response actions taken or to be taken, or response costs incurred or to be incurred, in connection with the Site.

b. In consideration of the actions that will be performed by Weyerhaeuser pursuant to this Consent Decree and the payments that will be made by Weyerhaeuser under the terms of the Consent Decree, and except as specifically provided in Paragraphs 102, 103, 106, and 108 of this Section, the United States covenants not to sue or to take administrative action against Weyerhaeuser pursuant to 7003 of RCRA or Sections 106 or 107(a) of CERCLA for the Mill RI/FS, Mill Work, the OU4 Work, Past Response Costs, and Specified Future Response Costs at OU4 and the Plainwell Mill Property. With respect to Past Response Costs and the OU4 Work except for future liability, these covenants not to sue shall take effect upon receipt by EPA of the payments required by Paragraph 69 of Section XVIII (Payments by Weyerhaeuser). With respect to the Mill RI/FS, Mill Work, future liability relating to the OU4 Work, and Specified Future Response Costs, these covenants not to sue shall take effect upon EPA's certification of the construction of the Mill Remedial Action and certification of the construction of the OU4 Remedial Action pursuant to Paragraphs 63 and 65 respectively of Section XVI (Certifications of Completion). These covenants not to sue are conditioned upon the satisfactory performance by Weyerhaeuser of its obligations under this Consent Decree. These covenants not to sue extend only to Weyerhaeuser and do not extend to any other person.

102. United States' Pre-certification Reservations. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Weyerhaeuser:

- a. to perform further response actions relating to the Mill or OU4; or
- b. to reimburse the United States for additional costs of response at the Mill or OU4 if, prior to Certification of Completion of the construction of the Mill Remedial Action or the OU4 Remedial Action:

- (1) conditions at the Mill or OU4, previously unknown to EPA, are discovered, or

- (2) information, previously unknown to EPA, is received, in whole or in part, and EPA determines that these previously unknown conditions or information together with any other relevant information indicates that either the Mill Remedial Action or the OU4 Remedial Action is not protective of human health or the environment.

103. United States' Post-certification Reservations. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Weyerhaeuser:

- a. to perform further response actions relating to the Mill or OU4; or
- b. to reimburse the United States for additional costs of response at the Mill or OU4 if, subsequent to Certification of Completion of the construction of the Mill Remedial Action or the OU4 Remedial Action:

(1) conditions at the Mill or OU4, previously unknown to EPA, are discovered, or

(2) information, previously unknown to EPA, is received, in whole or in part, and EPA determines that these previously unknown conditions or this information together with other relevant information indicate that either the Mill Remedial Action or the OU4 Remedial Action is not protective of human health or the environment.

104. With regard to the provisions in Paragraph 102 pertaining to the Mill, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date the Mill ROD is signed and set forth in the Mill ROD and the administrative record supporting the Mill ROD, including but not limited to information received pursuant to the requirements of Section VII (Performance of Mill Remedial Investigation and Feasibility Study). With regard to those provisions of Paragraph 103 pertaining to the Mill, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date of Certification of Completion of the construction of the Mill Remedial Action and set forth in the Mill ROD, the administrative record supporting the Mill ROD, the post-ROD administrative record for the Mill, or in any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the Mill Remedial Action.

105. With regard to the provisions in Paragraph 102 pertaining to OU4, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date the OU4 ROD was signed and set forth in the OU4 ROD and the administrative record supporting the OU4 ROD. With regard to the provisions of Paragraph 103 pertaining to OU4, the information and the conditions known to EPA shall include only that

information and those conditions known to EPA as of the date of Certification of Completion of the construction of the OU4 Remedial Action and set forth in the OU4 ROD, the administrative record supporting the OU4 ROD, the post-ROD administrative record for OU4, or in any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the construction of the OU4 Remedial Action.

106. General Reservations of Rights. The covenants not to sue set forth above do not pertain to any matters other than those expressly specified in Paragraph 101 above. The United States reserves, and this Consent Decree is without prejudice to, all rights against Weyerhaeuser with respect to all matters not expressly included within the United States' covenant not to sue. Notwithstanding any other provision of this Consent Decree, the United States reserves all rights against Weyerhaeuser with respect to:

- a. claims based on a failure by Weyerhaeuser to meet a requirement of this Consent Decree;
- b. liability arising from the past, present, or future disposal, release, or threat of release of Waste Material outside of the Site, or on or under any portion of the Site other than the Mill and OU4;
- c. liability for future disposal of Waste Material at the Site by Weyerhaeuser, other than as provided in the Mill RI/FS, Mill ROD, the Mill Work, OU4 ROD, the OU4 Work, or otherwise ordered by EPA;
- d. liability for damages for injury to, destruction of, or loss of natural resources at the Site, and for the costs of any natural resource damage assessments relating to the Site;
- e. criminal liability;

f. liability for violations of federal or State law which occur during or after implementation of the Mill RI/FS, the Mill Work, and the OU4 Work;

g. liability, prior to Certification of Completion of Construction of the Mill Remedial Action, for additional response actions that EPA determines are necessary to achieve the Mill Performance Standards, but that cannot be required pursuant to Paragraph 23 (Modification of the Mill SOW or Related Work Plans);

h. liability, prior to Certification of Completion of Construction of the OU4 Remedial Action, for additional response actions that EPA determines are necessary to achieve the OU4 Performance Standards, but that cannot be required pursuant to Paragraph 31 (Modification of the OU4 SOW or Related Work Plans);

i. previously incurred Past Response Costs above the amounts reimbursed pursuant to Paragraph 69;

j. liability for any other area or operable unit at the Site, including the Kalamazoo River Operable Unit; and

k. liability for costs that the United States will incur related to the Site but are not within the definition of Specified Future Response Costs.

107. Work Takeover

a. In the event EPA determines that Weyerhaeuser has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portions of the Work as EPA determines necessary.

b. Weyerhaeuser may invoke the procedures set forth in Section XXII (Dispute Resolution), Paragraph 84 (Record Review), to dispute EPA's determination that takeover of the Mill RI/FS, Mill Work, or OU4 Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Specified Future Response Costs that Weyerhaeuser shall pay pursuant to Section XVIII (Payments by Weyerhaeuser).

108. Notwithstanding any other provision of this Consent Decree, the United States retains all authority and reserves all rights to take any and all response actions authorized by law.

XXV. COVENANTS BY WEYERHAEUSER

109. Withdrawal of Objections to Plainwell Settlement Agreement. Within 5 days of the Effective Date, Weyerhaeuser shall withdraw: (i) all claims, contentions, motions, and objections regarding the Plainwell Settlement Agreement in any federal or state court or administrative forum; and (ii) all comments submitted to the United States Department of Justice regarding the Plainwell Settlement Agreement. As of the Effective Date, Weyerhaeuser covenants not to assert or file, in any federal or state court or administrative forum, any claims, contentions, motions, or objections which directly or indirectly pertain to or affect the Plainwell Settlement Agreement.

110. Covenant Not to Sue. Subject to the reservations in Paragraph 112, Weyerhaeuser hereby covenants not to sue and agrees not to assert any claims or causes of action against the United States with respect to the Mill RI/FS, Mill Work, OU4 Work, Past Response Costs, and Specified Future Response Costs, as defined herein, or this Consent Decree, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or any other provision of law;

b. any claims against the United States, including any department, agency or instrumentality of the United States, under CERCLA Sections 107 or 113 related to OU4 or the Mill;

c. any claims arising out of response actions at or in connection with OU4 or the Mill, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

d. any direct or indirect claim for disbursement from the Allied Paper, Inc./Portage Creek/Kalamazoo River Special Account, the Kalamazoo River Special Account, or 12th Street Landfill OU#4/Plainwell Mill Property Disbursement Special Account (established pursuant to this Consent Decree), except as provided in Section VI.

111. Except as provided in Paragraph 114 (Waiver of Claims Against *De Micromis* Parties), Paragraph 115 (Waiver of Claims Against *De Minimis* Parties), and Paragraph 121 (Waiver of Claim-Splitting Defenses), these covenants not to sue shall not apply in the event that the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 102, 103, and 106 (b) - (d) or 106 (g) - (j), but only to the extent that Weyerhaeuser's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

112. Weyerhaeuser reserves, and this Consent Decree is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, any such claim shall not include a claim for any damages caused, in whole or

in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671; nor shall any such claim include a claim based on EPA's selection of response actions, or the oversight or approval of Weyerhaeuser's plans or activities. The foregoing applies only to claims which are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA.

113. Nothing in this Consent Decree shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

114. Weyerhaeuser agrees not to assert any claims and to waive all claims or causes of action that it may have for all matters relating to the Mill and OU4, including for contribution, against any person where the person's liability to Weyerhaeuser with respect to the Mill and OU4 is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Mill and OU4, or having accepted for transport for disposal or treatment of hazardous substances at the Mill and OU4, if:

a. the materials contributed by such person to the Mill and OU4 containing hazardous substances did not exceed the greater of (i) 0.002% of the total volume of waste at the Site, or (ii) 110 gallons of liquid materials or 200 pounds of solid materials.

b. This waiver shall not apply to any claim or cause of action against any person meeting the above criteria if EPA has determined that the materials contributed to the Mill and OU4 by such person contributed or could contribute significantly to the costs of response at the Mill and OU4. This waiver also shall not apply with respect to any defense, claim, or cause of action that Weyerhaeuser may have against any person if such person asserts a claim or cause of action relating to the Mill and OU4 against Weyerhaeuser.

115. Weyerhaeuser agrees not to assert any claim and to waive all claims or causes of action that it may have for all matters relating to the Mill and OU4, including for contribution, against any person that has entered into a final CERCLA § 122(g) *de minimis* settlement with EPA with respect to the Site as of the Effective Date. This waiver shall not apply with respect to any defense, claim, or cause of action that Weyerhaeuser may have against any person if such person asserts a claim or cause of action relating to the Site against Weyerhaeuser.

XXVI. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

116. Except as provided in Paragraph 114 (Waiver of Claims Against *De Micromis* Parties) and Paragraph 115 (Waiver of Claims Against *De Minimis* Parties), nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Except as provided in Paragraph 114 (Waiver of Claims Against *De Micromis* Parties) and Paragraph 115 (Waiver of Claims Against *De Minimis* Parties), each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to OU4 or to the Plainwell Mill Property against any person not a Party hereto.

117. Statutory Contribution Protection. The Parties agree, and by entering this Consent Decree this Court finds, that Weyerhaeuser is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2) for “matters addressed” in this Consent Decree. The “matters addressed” in this Consent Decree are solely the Mill RI/FS, the Mill Work, the OU4 Work, Past Response Costs, and Specified Future Response Costs at OU4 and the Mill. The “matters addressed” in this Consent Decree do not include

response actions or response costs with respect to any other area or operable unit at the Site, including the Kalamazoo River Operable Unit, or those response actions or those response costs as to which the United States has reserved its rights in Paragraph 103, 104, and 106 of this Consent Decree (except for claims for failure to comply with this Consent Decree), in the event that the United States asserts its rights against Weyerhaeuser coming within the scope of any such reservation.

118. Weyerhaeuser agrees and EPA acknowledges that in any future contribution action a portion of the \$6.2 million paid by Weyerhaeuser to EPA under this Consent Decree will apply to OU4 and/or the Mill and a portion of those monies will apply to the Kalamazoo River Operable Unit.

119. Weyerhaeuser agrees that with respect to any suit or claim for contribution brought by it for matters related to this Consent Decree it will notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.

120. Weyerhaeuser also agrees that, with respect to any suit or claim for contribution brought against it for matters related to this Consent Decree, Weyerhaeuser will notify in writing the United States within 10 days of service of the complaint on it. In addition, Weyerhaeuser shall notify the United States within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial.

121. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Weyerhaeuser shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph

affects the enforceability of the covenants not to sue set forth in Section XXIV (Covenant Not to Sue by United States).

XXVII. ACCESS TO INFORMATION

122. Weyerhaeuser shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at OU4 and the Mill, or the implementation of this Consent Decree, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Mill RI/FS, the Mill Work, and the OU4 Work. Weyerhaeuser shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Mill RI/FS, the Mill Work, and the OU4 Work. The United States shall be entitled, upon 30 days notice, to inspect, copy and audit all accounting and other records maintained by Weyerhaeuser, and its contractors and subcontractors, pursuant to Section XII of this Consent Decree.

123. Business Confidential and Privileged Documents

a. Weyerhaeuser may assert business confidentiality claims covering part or all of the documents or information submitted to Plaintiff under this Consent Decree to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified Weyerhaeuser that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such

documents or information without further notice to Weyerhaeuser.

b. Weyerhaeuser may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Weyerhaeuser asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information; and (6) the privilege asserted by Weyerhaeuser. Nevertheless, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

124. No claim of privilege or confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XXVIII. RETENTION OF RECORDS

125. Until 10 years after Weyerhaeuser receives notification of Certification or Completion of the Mill Work and Certification of Completion of the OU4 Work pursuant to Paragraph 64.b or 66.b respectively of Section XVI (Certifications of Completion), whichever is later, Weyerhaeuser shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to its liability under CERCLA with respect to OU4 or the Plainwell Mill Property, provided, however, that Weyerhaeuser must also retain all documents and records that relate to the liability of any other person under CERCLA with respect

to OU4 or the Plainwell Mill Property. Weyerhaeuser must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any documents or records (including documents or records in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work, provided, however, that Weyerhaeuser (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned documents required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

126. At the conclusion of this document retention period, Weyerhaeuser shall notify the United States at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States, Weyerhaeuser shall deliver any such records or documents to EPA. Weyerhaeuser may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Weyerhaeuser asserts such a privilege, it shall provide Plaintiff with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Weyerhaeuser. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

127. Weyerhaeuser hereby certifies that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability

regarding the Site since notification of potential liability by the United States or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Section 104(e) and 122(e) of CERCLA, 42 U.S.C. 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. 6927.

XXIX. NOTICES AND SUBMISSIONS

128. Whenever, under the terms of this Consent Decree, written notice is required to be given or a report or other document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Party in writing. Whenever a Party is required under this Consent Decree to submit or respond to a plan, report, or other document within a prescribed time frame and the document is sent by U.S. mail or other mail service, four days shall be added to the prescribed time frame to allow adequate time for mail delivery. All notices and submissions shall be considered effective upon receipt, unless otherwise provided. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States, EPA, and Weyerhaeuser, respectively.

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Re: DOJ # 90-11-2-13702/2

As to EPA:

Richard C. Karl
Director, Superfund Division
United States Environmental Protection Agency
Region 5
77 W. Jackson Blvd.
Chicago, IL 60604

Shari Kolak

Remedial Project Manager
United States Environmental Protection Agency
Region 5
77 W. Jackson Blvd. SR-6
Chicago, IL 60604

Eileen L. Furey
Associate Regional Counsel
United States Environmental Protection Agency
Region 5
77 W. Jackson Blvd. C-14J
Chicago, IL 60604

As to the State or MDEQ:

Paul Bucholtz
Environmental Response Division
Michigan Department of Environmental Quality
Constitution Hall
525 West Allegan St.
P.O. Box 30426
Lansing, MI 48909-7926

As to the Regional Financial
Management Officer:

EPA Regional Financial Management Office
Anthony Audia, Chief
Program Accounting and Analysis Section
United States Environmental Protection Agency
Region 5
Mail Code: ML-10C
77 W. Jackson Blvd.
Chicago, IL 60604

As to Weyerhaeuser:

John P. Gross
Senior Environmental Manager
Weyerhaeuser Company
33810 Weyerhaeuser Way S.
Mail Stop EC2-2C1
Federal Way, WA 98001

XXX. EFFECTIVE DATE

129. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court, except that Weyerhaeuser hereby agrees that it shall be bound upon the Date of Lodging to comply with obligations of Weyerhaeuser specified in this Consent Decree

as accruing upon the Date of Lodging. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding obligation of Weyerhaeuser to comply with requirements of this Consent Decree upon the Date of Lodging shall terminate.

XXXI. RETENTION OF JURISDICTION

130. This Court retains jurisdiction over both the subject matter of this Consent Decree and Parties for the duration of the performance of the terms and provisions of this Consent Decree for the purpose of enabling either of the Parties to apply to the Court at any time for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Consent Decree, or to effectuate or enforce compliance with its terms, or to resolve disputes in accordance with Section XXII (Dispute Resolution) hereof.

XXXII. APPENDICES

131. The following appendices are attached to and hereby incorporated into this Consent Decree:

“Appendix A” is a summary description of OU4.

“Appendix B” is a map generally depicting the location of OU4.

“Appendix C” is the OU4 ROD.

“Appendix D” is a map generally depicting the Site.

“Appendix E” is the draft OU4 SOW, the final form of which shall be in substantially that form.

“Appendix F” is a draft form of easement.

“Appendix G” sets forth the manner in which the Disbursement Special Account shall be managed.

“Appendix H” is a summary description of the Mill.

XXXIII. COMMUNITY RELATIONS

132. Weyerhaeuser shall propose to EPA its participation in the community relations plan to be developed by EPA. EPA will determine the appropriate role for Weyerhaeuser under the plan. Weyerhaeuser shall also cooperate with EPA in providing information regarding the Mill Work and OU4 Work to the public. As requested by EPA, Weyerhaeuser shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site and/or relating to OU4 and the Mill.

XXXIV. MODIFICATION

133. Schedules specified in this Consent Decree for completion of the Mill RI/FS, Mill Work, and the OU4 Work may be modified by agreement of EPA and Weyerhaeuser. All such modifications shall be made in writing.

134. Except as provided in Paragraphs 23 (Modification of the Mill SOW and Related Work Plans) and 31 (Modification of the OU4 SOW and Related Work Plans), no material modifications shall be made to the Mill RI/FS SOW, the Mill SOW, or the OU4 SOW after issuance of each by EPA, or shall be made to this Consent Decree, without written agreement of the United States and Weyerhaeuser, and the approval of the Court. Any modification that fundamentally alters the basic features of the selected remedy within the meaning of 40 C.F.R. § 300.435(c)(2)(B)(ii) shall be considered a material modification. Prior to providing its approval to any material modification, the United States will provide MDEQ with a reasonable opportunity to review and comment on the proposed modification. Non-material modifications to the Consent Decree may be made by written agreement of the Parties and shall be filed in this Court. Modifications to the Mill RI/FS SOW, the Mill SOW or the OU4 SOW that do not materially alter those documents, or material modifications

to the Mill RI/FS SOW, the Mill SOW or the OU4 SOW that do not fundamentally alter the basic features of the selected remedy within the meaning of 40 C.F.R. § 300.435(c)(2)(B)(ii), may be made by written agreement between EPA, after providing MDEQ with a reasonable opportunity to review and comment on the proposed modification, and Weyerhaeuser.

135. Nothing in this Decree shall be deemed to alter the Court's power to enforce, supervise or approve modifications to this Consent Decree.

XXXV. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

136. This Consent Decree shall be lodged with the Court for a period of not less than fifteen (15) days for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622(d)(2), and 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. Weyerhaeuser consents to the entry of this Consent Decree without further notice.

137. If for any reason the Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of either Party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

XXXVI. SIGNATORIES/SERVICE

138. Each undersigned representative of Weyerhaeuser and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document.

139. Weyerhaeuser hereby agrees not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree unless the United States has notified

Weyerhaeuser in writing that it no longer supports entry of the Consent Decree.

140. Weyerhaeuser shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of Weyerhaeuser with respect to all matters arising under or relating to this Consent Decree. Weyerhaeuser hereby agrees to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons. The Parties agree that Weyerhaeuser need not file an Answer to the Complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

XXXVII. FINAL JUDGMENT

141. This Consent Decree and its appendices constitute the final, complete, and exclusive agreement and understanding among the parties with respect to the settlement embodied in the Consent Decree. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Consent Decree.

142. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between the United States and Weyerhaeuser. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

SO ORDERED THIS 15 DAY OF February, 2005.

/s/ Robert Holmes Bell
United States District Judge

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Weyerhaeuser Company, relating to OU4 and the Plainwell Inc. Mill Property at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site.

FOR THE UNITED STATES OF AMERICA

12/15/04

Tom Sansonetti

THOMAS L. SANSONETTI
Assistant Attorney General
U.S. Department of Justice
Environment & Natural Resources
Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Ben Franklin Station
Washington, D.C. 20044-7611

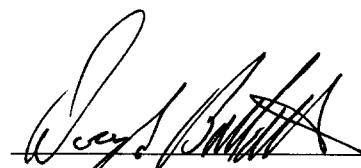
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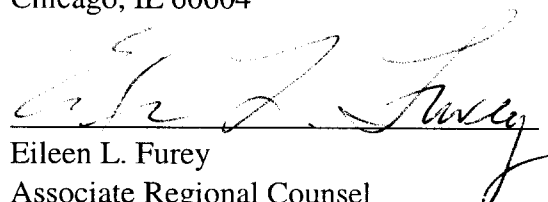
RENITA Y. FORD
Trial Attorney
Environmental Enforcement Section
Environment & Natural Resources
Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Ben Franklin Station
Washington, D.C. 20044-7611
Phone: (202) 305-0232
Fax: (202) 514-0097

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Weyerhaeuser Company, relating to OU4 and the Plainwell Inc. Mill Property at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site.

12/20/04
Date


for Richard C. Karl, Director
Superfund Division
Region 5
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

12/18/04
Date


Eileen L. Furey
Associate Regional Counsel
U.S. Environmental Protection Agency
Region 5
77 W. Jackson Blvd. C-14J
Chicago, IL 60604

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Weyerhaeuser Company, relating to OU4 and the Plainwell Inc. Mill Property at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site.

FOR WEYERHAEUSER COMPANY

11-4-04
Date

Signature: *Patricia M. Radient*
Name (print): Patricia M. Radient
Title: Vice President Strategic Planning
Address: 33663 Weyerhaeuser Way South
Mail stop CH5B
Federal Way, WA 98003

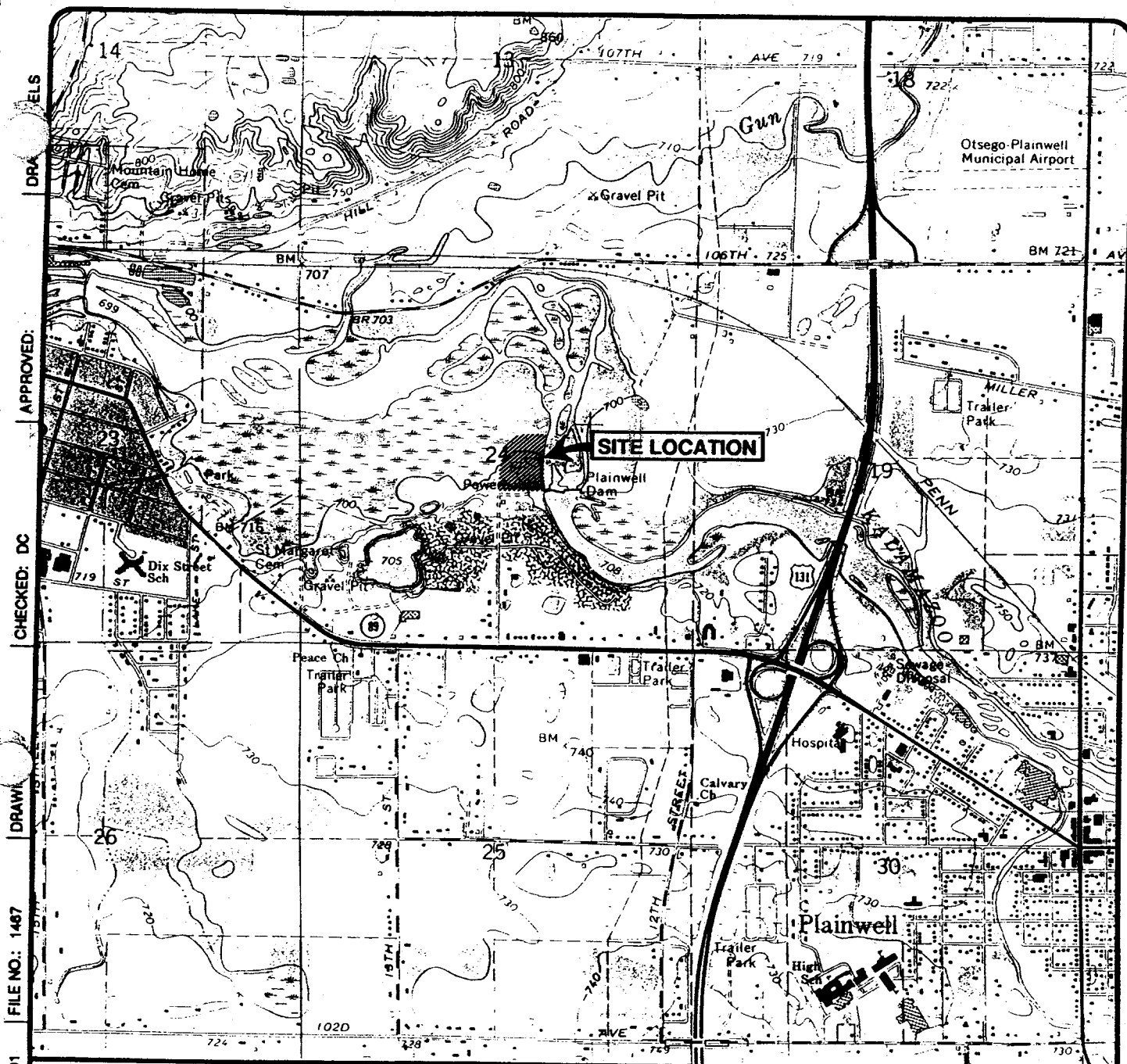
Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name (print): JOSEPH P. JACKOWSKI
Title: SENIOR LEGAL COUNSEL
Address: 33663 WEYERHAEUSER WAY SOUTH
FEDERAL WAY, WA 98003
Ph. Number: 253-924-3461

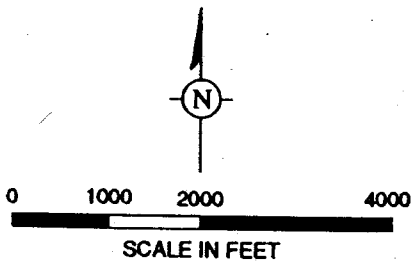
Appendix A - DESCRIPTION OF OU4

OU4 is located in the middle of Section 24, Township 1N, Range 12W, approximately 1.5 miles northwest of the City of Plainwell in Allegan County, Michigan, and 0.5 miles northeast of the Highway M-89 and 12th Street intersection. The 12th Street Landfill is approximately 6.5 acres, and is bordered to the east by the former powerhouse discharge channel of the Plainwell Dam on the Kalamazoo River, to the north and northwest by wetlands, to the southeast by woodlands, and to the west by a gravel mining operation. OU4 includes the 12th Street Landfill; groundwater contamination and leachate generated by the 12th Street Landfill; the woodland immediately south/southeast of the 12th Street Landfill; wetlands that border the landfill to the north and northwest; a portion of the gravel operation property that borders the 12th Street Landfill to the west; and a portion of the former powerhouse channel of the Plainwell Dam on the Kalamazoo River.

Source: Record of Decision issued by MDEQ, with U.S. EPA's concurrence, for OU4 of the Allied Paper/Portage Creek/Kalamazoo River Superfund Site, dated September 28, 2001.



SOURCE: USGS 7.5 Minute Topographic Map, OTSEGO, MICHIGAN Quadrangle, 1973



**GERAGHTY
& MILLER, INC.**
Environmental Services
a holdemil company

SITE LOCATION MAP

REMEDIAL INVESTIGATION REPORT
12TH STREET LANDFILL OPERABLE UNIT
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE

FIGURE

1

APPENDIX C

**EPA/ROD/R05-01/521
2001**

EPA Superfund Record of Decision:

**ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO
RIVER**

EPA ID: MID006007306

OU 04

KALAMAZOO, MI

09/28/2001

DECLARATION

SELECTED REMEDIAL ALTERNATIVE FOR THE 12th STREET LANDFILL-OPERABLE UNIT 4 OF THE ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE CITY OF PLAINWELL, MICHIGAN

Statement of Basis and Purpose

This decision document presents the selected remedial action (RA) for the 12th Street Landfill-Operable Unit 4 (12th St.-OU4) of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund site (Site). The 12th St.-OU4 is one of several polychlorinated biphenyl (PCB) source areas attributed to the potentially responsible parties (PRPs) at the Site. The remedy was chosen in a manner that is consistent with the Comprehensive Environmental Response, Compensation, and Liability Act, 1980 PL 96-510 (42 U.S.C. § 9601 et. Seq.), as amended by the Superfund Amendments and Reauthorization Act of 1986, as well as the Superfund implementing regulations of the National Oil and Hazardous Substances Pollution Contingency Plan (40 Code of Federal Regulations (CFR) Part 300). This Record of Decision (ROD) is applicable only to the 12th St.-OU4, which comprises the 12th Street Landfill (landfill) and four areas outside the landfill where PCB-contaminated residual material has eroded.

The 12th St.-OU4 is located near the city of Plainwell, Allegan County, Michigan (Figure 1). PCBs are present in the paper residuals (residuals) disposed of at the landfill by the owners and operators of the Plainwell Paper Mill. Due to erosion, the PCB-contaminated residual material has migrated from the landfill to the adjacent areas. Listed below are the PCB-contaminated areas that comprise this operable unit (Figure 2).

1. The landfill from which the PCB contamination in surrounding areas migrated, including any groundwater contamination and landfill leachate, if any.
2. The woodland area (woodland) in the southeast corner of the 12th St.-OU4.
3. Wetlands, as identified by National Wetland Inventory maps, adjacent to the landfill to the north and northwest (wetlands).
4. A portion of the adjacent gravel operation property (adjacent property), that borders the landfill to the west.
5. The portion of the former powerhouse discharge channel of the Plainwell Dam (former powerhouse discharge channel) on the Kalamazoo River that contains residuals that are contiguous with the east side of the landfill.

Assessment of the Site

The actual or threatened releases of hazardous substances from the 12th St.-OU4, if not addressed by implementing the RA in this ROD, present an imminent and substantial endangerment to public health, welfare, or the environment.

Description of the Selected Remedy

The purpose of this remedy is to eliminate the continued migration of PCBs from the 12th St.-OU4 to the Kalamazoo River, as well as from the landfill to the woodland, wetlands, adjacent property, and the former powerhouse discharge channel. This remedy will reduce, and possibly eliminate the unacceptable risk associated with the landfill from exposure to PCBs. This RA includes excavating the eastern portion of the landfill adjacent to the former powerhouse discharge channel and the Kalamazoo River; excavation of residual material that has eroded into the areas outside the landfill; relocation of the excavated material back into the landfill; and, construction of an on-site containment system.

This ROD covers the landfill and the residual material that is present in the adjacent areas that are listed above. The remaining portion of the former powerhouse discharge channel and those locations within the adjacent areas where there is no visual evidence of residual material are not addressed in this RA. Visual criteria will be the primary method by which PCB-contaminated materials will be identified, although this ROD does provide that the agency implementing this remedy can require additional sampling and analysis at those locations where it determines that visual criteria alone are inadequate to determine the extent of eroded, PCB-contaminated materials. The selected remedy further provides for post-excavation sampling in order to determine whether, upon completion of the remedy selected in this ROD, additional remedial work is necessary to reduce the risk to human health or the environment to levels acceptable under applicable or relevant and appropriate requirements. If such post-excavation sampling determines that unacceptable risks remain, additional remedial work will be required in future RODs for the site.

The major components of the selected remedy include:

1. Excavation and relocation into the landfill of contaminated residuals currently in the woodland, wetlands, and adjacent property, and the residuals in the former powerhouse discharge channel that are contiguous with the eastern side of the landfill. Following relocation into the landfill of the residual material, a containment system shall be constructed that complies with the requirements of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).
2. Excavation and relocation into the landfill of the east side of the landfill along the former powerhouse discharge channel. The excavation shall be extensive enough to create a buffer zone sufficient to insure that, for the lifetime of the remedy, no hydraulic connection exists between the PCB-contaminated wastes within the newly constructed landfill containment system and the Kalamazoo River or the former powerhouse discharge channel.

3. Restoration of areas that are excavated, cleared and grubbed, or otherwise affected by the RA.
4. A side wall containment system (SWCS) shall be constructed around the outside of the landfill. The existing sides of the landfill are constructed of sand, fly ash, and PCB-contaminated residuals and were not designed to provide side slope stability, flood protection, and erosion control, or to prevent releases of leachate. The existing sides shall be completely covered by a new SWCS that is designed to prevent the release of PCBs and which provides the necessary side slope stability, flood protection, and erosion control. The containment system shall be designed to meet the relevant portions of the Michigan Solid Waste Landfill closure regulations pursuant to Part 115, Solid Waste Management, of the NREPA. Disposal of the residuals with PCB contamination at or above 50 parts per million, which are PCB remediation wastes under the Toxic Substance Control Act (TSCA), will take place pursuant to the risk-based disposal method set forth in 40 CFR Section 761.61(c). The erosion protection provided shall be sufficient to protect the containment system from a 500-year flood event. The erosion protection shall extend to a minimum elevation of 707.0 feet above mean sea level, which is two feet above the 100-year flood elevation.
5. A cover (cap) will be constructed over the landfill as part of the containment system to minimize infiltration of precipitation through the landfill, prevent migration of residuals or leachate from the landfill into the adjacent areas, and eliminate direct contact hazards. The cap shall be designed to meet relevant portions of the closure regulations pursuant to Part 115, Solid Waste Management, of the NREPA. The cap consists of the following components from bottom to top:
 - A select granular fill layer at least six inches thick shall be placed on top of the landfill as a suitable sub-grade for the cap. The need for a gas venting system shall be assessed by the PRP's in the remedial design (RD). If it is determined that a gas venting system is necessary, then this layer shall be designed and constructed to serve as a gas-venting layer. This gas-venting layer shall be capable of collecting the landfill gas produced and efficiently conveying it to a passive venting system. Clean granular fill from an off-site source, having a minimum hydraulic conductivity of 1×10^{-3} centimeters per second, shall be used to construct the layer.
 - A geomembrane liner (barrier layer) of at least 30-mil thick polyvinyl chloride (PVC) or its equivalent, as approved by the lead agency, shall be placed over the granular fill. The PVC geomembrane liner shall act as a barrier to minimize infiltration of precipitation into the residuals. The most appropriate liner material shall be determined in the RD and must be approved by the lead agency.

- A general fill layer (protective layer) at least 24 inches thick shall be placed above the 30-mil PVC geomembrane liner, or its equivalent. The protective layer shall be capable of sustaining the growth of nonwoody plants and shall have adequate water holding capacity. The water that accumulates within this layer shall drain to a ditch or a sedimentation outlet structure and subsequently discharge into the Kalamazoo River.
 - A vegetative layer at least six inches thick shall be placed over the protective layer. This layer shall be designed to promote vegetative growth, provide surface water runoff, and minimize erosion.
6. Following the completion of the RA, an appropriate groundwater monitoring network shall be installed and long-term groundwater monitoring shall be performed in accordance with an approved monitoring plan. Existing wells that are no longer in use shall be properly abandoned. Monitoring of the groundwater aquifer under the landfill shall be conducted in accordance with Part 201, Environmental Remediation, of the NREPA, and the TSCA (40 CFR Section 761.75(b)(6)).
 7. Short-term surface water monitoring shall be conducted during excavation activities in accordance with a lead agency approved monitoring plan.
 8. Deed restrictions, approved by the lead agency, that are necessary to appropriately restrict future land use pursuant to Section 20120a(1)(i) of the NREPA shall be imposed on the landfill portion of the 12th St.-OU4 before the RA is final.
 9. A fence shall be constructed to enclose the landfill and permanent markers and approved warning signs shall be placed around the perimeter of the landfill as required by Part 201, Environmental Remediation, of the NREPA.
 10. The need for a leachate collection system shall be investigated by the PRPs in the RD and shall be designed and constructed as part of the RA if determined to be necessary by the lead agency.
 11. Provisions for long-term maintenance and post-closure care, approved by the lead agency, shall be implemented.

Statutory Determinations

The lead agency has concluded that the selected RA for the 12th St.-OU4 is necessary and appropriate to protect human health, safety and welfare, and the environment. The selected RA is in compliance with federal and state requirements that are legally applicable or relevant and appropriate. The United States Environmental Protection Agency (U.S. EPA) concurs with this determination. The selected RA for the 12th St.-OU4 utilizes permanent solutions and alternative treatment technologies, or resource

recovery technologies, to the maximum extent practicable. A final decision on whether additional response actions are necessary for those areas of this OU not addressed in this ROD will be made as part of the ROD for the Phase I portion of the Kalamazoo River.

To ensure that the remedy continues to provide adequate protection of human health and the environment, a review shall be conducted within five years after commencement of the RA, and every five years thereafter. This shall be necessary because this remedy will result in hazardous substances remaining on-site above health-based and ecological based levels.

The lead agency's submission to the U.S. EPA of this ROD and its related documents (e.g., the RI/FS) and its request for concurrence with the determination of this ROD, constitute the application for risk-based disposal approval required by 40 CFR Section 761.61(c)(2), and represents U.S. EPA's determination that the disposal method set forth in this ROD for PCB remediation wastes will not pose an unreasonable risk of injury to human health or the environment.

William E. Muno, Director, Superfund Division
United States Environmental Protection Agency

Date

Russell J. Harding, Director
Michigan Department of Environmental Quality

Date

SUMMARY OF REMEDIAL ALTERNATIVE SELECTION

I. DECISION SUMMARY

A. SITE LOCATION AND DESCRIPTION

The Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (the Site) is located in Kalamazoo and Allegan Counties, Michigan. The Site includes the Kalamazoo River and its adjacent floodplains and wetlands, from Morrow Lake Dam in Comstock Township, Kalamazoo County, downstream to Lake Michigan, as well as the lower three miles of Portage Creek, from Cork Street to the confluence with the Kalamazoo River. Five paper residual disposal areas and six paper mill properties located along the Kalamazoo River and Portage Creek are also included as part of the Site. Based on data collected by the potentially responsible parties (PRPs), it is estimated that there are at least 350,000 pounds of polychlorinated biphenyls (PCBs) in the sediment and soils in and adjacent to Portage Creek and the Kalamazoo River. The Site has been divided into several Operable Units (OUs), one of which is the 12th Street Landfill (12th St.-OU4), the subject of this Record of Decision (ROD).

The 12th St.-OU4 is located in the middle of Section 24, Township 1N, Range 12W, approximately 1.5-miles northwest of the city of Plainwell in Allegan County, Michigan, and 0.5-miles northeast of the Highway M-89 and 12th Street intersection (Figure 1). The 12th Street Landfill (landfill) is approximately 6.5 acres, and is bordered to the east by the former powerhouse discharge channel of the Plainwell Dam on the Kalamazoo River, to the north and northwest by wetlands, to the southeast by woodlands, and to the west by a gravel mining operation.

The areas that comprise the 12th St.-OU4 and that will be addressed by this ROD are shown on Figure 2 and listed below:

- The landfill itself, which primarily contains PCB-contaminated paper residuals (residuals), and from which PCB contamination has migrated into the surrounding areas.
- Groundwater contamination and any PCB-contaminated landfill leachate.
- The woodland located immediately south/southeast of the landfill.

- Wetlands, as identified by National Wetland Inventory maps, that border the landfill to the north and northwest.
- A portion of the adjacent gravel operation property (adjacent property) that borders the landfill to the west.
- A portion of the former powerhouse discharge channel of the Plainwell Dam on the Kalamazoo River, which contains residuals that have eroded from the east side of the landfill.

The 12th St.-OU4 is one of the major source areas of the Site. The landfill contains PCB-contaminated residuals, which have migrated into surrounding soils and river sediments. The landfill is a current, and potentially continuing, source of PCBs to the Kalamazoo River, its associated floodplains and wetlands, and to Lake Michigan. The remedial investigation (RI) for the 12th St.-OU4, together with other investigative documents prepared for the Site, have established that PCBs migrate from the 12th St.-OU4 into adjacent properties and, ultimately, off-site due to erosion. This migration of PCBs contributes to the ongoing contamination of the soils, sediments, surface water, and biota of the Site and Lake Michigan.

The Kalamazoo River and Portage Creek have been designated a site of environmental contamination under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), due to PCB contamination. The Kalamazoo River and Portage Creek have been identified as an Area of Concern by the International Joint Commission on the Great Lakes due to the detrimental impact the release of PCBs has on Lake Michigan. Because of widespread PCB contamination, the Site was placed on the National Priorities List (NPL) in August 1990 in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, 1980 PL 96-510 (CERCLA). In addition, due to the PCB contamination, the Michigan Department of Community Health has issued a fish consumption advisory annually since 1977 for reaches of the Kalamazoo River and Portage Creek, including the reach of the Kalamazoo River adjacent to the 12th St.-OU4.

The landfill, woodland, wetlands, adjacent property, and the former powerhouse discharge channel of the Kalamazoo River provide habitat for numerous important fish, aquatic, and terrestrial species. Species of special concern at the Site, including the 12th St.-OU4, include mink and eagles, due to their sensitivity to PCB contamination.

The river reach next to the 12th St.-OU4 is an important natural resource for southwest Michigan, providing recreational opportunities such as fishing, hunting, trapping, bird watching, boating, and swimming. The public enjoys recreational opportunities such as hiking and biking along extensive trail systems. Residents and visitors to the area also enjoy wetland and woodland habitats that support numerous species of plants, birds, reptiles, amphibians, and mammals.

B. SITE HISTORY AND ENFORCEMENT ACTIVITIES

PCBs are a hazardous substance and probable human carcinogen. The landfill contains an estimated 208,000 cubic yards of PCB-contaminated residuals, consisting predominantly of mineral matter in the form of gray clay. The PCB waste was generated at the Plainwell Paper Mill and disposed of by the past owners and operators of the mill in a low lying wetland area, which is now the landfill. From 1955 to 1981, the landfill was used for disposal of residuals from the paper mill.

Once the PCB-contaminated residuals were dumped, they could flow unrestricted out into the woodland, wetlands, adjacent property, former powerhouse discharge channel, and the Kalamazoo River. RI activities and site reconnaissance indicate that this waste entered the former powerhouse discharge channel, wetlands, woodland, and the adjacent property to the west. Historical photography does not show any evidence of containment.

In 1970 the Michigan Department of Environmental Quality (MDEQ) conducted a routine surface water and biota sampling at the mouth of the Kalamazoo River. The results of this investigation indicated that PCBs in the river were being discharged into Lake Michigan. A biological survey conducted by the MDEQ in 1971, pursuant to a federal Water Pollution Control Act (WPCA) program to monitor tributaries of Lake Michigan, confirmed that PCBs in the Kalamazoo River were discharging to Lake Michigan and were bioavailable.

PCBs are an oily liquid, clear to light yellow in color, and have no smell or taste. PCBs are a hazardous substance, are carcinogenic in animals, and a probable human carcinogen. Characteristics of PCBs that cause them to be especially persistent in the environment are that they bind strongly to soils, do not dissolve well in water, are not easily broken down, and are lipophilic and therefore have an affinity for the fatty tissue of biota. These characteristics cause PCBs to bioaccumulate.

A search conducted in 1990 identified three PRPs for the PCB contamination: H.M. Holdings, Inc. (now known as Millennium Holdings, Inc./Allied Paper, Inc.), Georgia-Pacific Corporation, and Simpson Plainwell Paper Company (now known as

Plainwell Paper, Inc.). These PRPs were notified of their status as potentially liable parties on June 23, 1990. In 1994, the James River Corporation (now known as Fort James Corporation) was added as a PRP. These four parties have been identified as PRPs due to past paper mill operations involving the recycling and deinking of office waste paper that included carbonless copy paper during the period from 1957 to at least 1971. During this time PCB-contaminated paper residuals were discharged directly to Portage Creek and the Kalamazoo River. The PRPs also disposed of large quantities of PCB-contaminated paper residuals in five disposal areas and several lagoons that subsequently released the residuals to Portage Creek and the Kalamazoo River.

On December 28, 1990, the PRPs signed an Administrative Order by Consent (AOC) with the state of Michigan and agreed to fund and conduct the RI/Feasibility Study (FS) for the Site, including the 12th St.-OU4. The RI/FS for the 12th St.-OU4 was initiated in July 1993, and completed in July 1997. The RI/FS reports, as well as all other appropriate data and materials, have been placed in the Administrative Record.

The Michigan Paper Company originally founded the Plainwell Paper Mill in 1886. Hamilton Paper purchased the mill in 1956 and named it the Michigan Division. Weyerhaeuser acquired the company in 1961 and operated the mill through the 1960s. Nicolet Paper Company was the owner from 1971-1975, and the mill became known as the Plainwell Paper Company. The mill retained the name Plainwell Paper Company under ownership by Philip Morris, Inc. and Philip Morris Industrial, Inc. from 1975 through 1984. The mill was then purchased by the Chesapeake Corporation in 1985. In late 1987, Simpson Paper Company purchased the mill and it became the Simpson Plainwell Paper Company. In 1998, the Simpson Plainwell Paper Company was merged into Plainwell Paper, Inc.

C. COMMUNITY PARTICIPATION

The Responsiveness Summary in Section II discusses the involvement of the community during the 12th St.-OU4 RI/FS and remedy selection process. As lead agency through the RI/FS process, the MDEQ has made every effort to ensure that the public, including the PRPs, have been afforded the opportunity to participate in the creation of the Administrative Record supporting this decision for the 12th St.-OU4, in a manner consistent with Sections 113 (k)(2)(B)(i)-(v), and 117 of the CERCLA. Attachment 1 is a brief synopsis of the community relation activities conducted by the MDEQ for this 12th St.-OU4.

D. SCOPE AND ROLE OF THE 12th St.-OU4 WITHIN THE SITE STRATEGY

The purpose of this ROD is to select the Remedial Action (RA) for the 12th St.-OU4.

The selection of remedies for the other OUs, including Portage Creek and the Kalamazoo River, will be addressed in RODs specific to those areas.

The selected remedy for 12th St.-OU4 is a source control remedy that relocates residual material from the areas outside the landfill back into the landfill, and contains the PCB-contaminated material within the landfill by constructing a cap and containment system. The RA will include wetland mitigation and restoration of all excavated areas or areas otherwise affected by the RA activities. The cap and containment system of the landfill will be considered a final action. Post excavation sampling will be conducted in the excavated areas outside the landfill in accordance with an approved workplan. A final decision on whether additional response actions are necessary for the areas outside the landfill that are part of this RA will be made as part of the ROD for the Phase I portion of the Kalamazoo River (Morrow Pond Dam downstream to Lake Allegan, including Portage Creek). The remedy for the landfill proper will prevent the future release of PCBs to surface water, sediments, and the area surrounding the landfill.

The remedy does not include treatment that would reduce toxicity, mobility, or volume as a principal element. A highly significant reduction in the mobility of PCB-contaminated material will be achieved, however, by means of source containment.

Although incineration was evaluated as a treatment option for these types of wastes as part of the King Highway Landfill Operable Unit 3 (KHL-OU3) remedy selection, the volume of the waste, implementation time, technical and administrative difficulties associated with implementation and cost made such a remedial approach prohibitive. Available information on landfill operations at the Site indicate, moreover, that it would not be feasible to locate and separately address concentrated areas of PCBs (hot spots) within the landfill because PCBs appear to be widespread throughout the landfill. Therefore, alternatives were not formally evaluated for identification and treatment or removal of hot spots. As required by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), a periodic (five-year) review of the remedy effectiveness will be performed.

E. SUMMARY OF 12th St.-OU4 CHARACTERISTICS

Land use in the immediate vicinity of the 12th St.-OU4 is generally characterized as industrial, with residential dwellings present beyond the nearby gravel pits and asphalt recycling/cement facilities that constitute the adjacent industrial use to the south and southwest. Extensive wetlands are present north and northwest of the

OU, and the Kalamazoo River and Plainwell Dam are located to the east and southeast. Access to the landfill is not reliably restricted. Fencing is present along the south side of the landfill only.

Based upon the information available to the MDEQ, the landfill portion of the 12th St.-OU4 is comprised mostly of paper residuals, with some concrete rubble and construction debris, waste lumber, and corroded steel drums. The presence of PCBs at the 12th St.-OU4 is a direct result of waste treatment systems operated at the Plainwell Paper Mill. The PCBs are associated with fine, gray, kaolinite clays that compose the bulk of the paper residuals that were disposed of in the landfill between 1955 and 1981.

The presence of PCB-contaminated residuals, soils, and sediments in areas outside the landfill is due to past or ongoing releases from the landfill. The sides of the landfill contain PCB-contaminated residuals that continue to be eroded into the woodland, wetlands, adjacent property, the former powerhouse discharge channel, and the Kalamazoo River. The possibility of catastrophic failure of any of the sides of the landfill is considered to be an additional potential release.

The cover on the landfill consists of sand, soil, and fly ash and ranges from between two and seven feet thick. This cover was applied only to the top of the landfill, and residual material on the sides remain exposed and have been and are being eroded into areas outside the landfill. The maximum thickness of the residuals within the landfill at the locations sampled is approximately 28 feet. There is perched PCB-contaminated leachate present in the landfill, due to the relatively low permeability of the residuals.

The upper portion of the surficial aquifer consists of sand and gravel, which is typical for this area. Geologic information, groundwater elevations, and stream stage elevations indicate that there is a hydraulic connection between shallow groundwater and the river. Plainwell Dam was found to have an influence on groundwater flow, particularly in the southeast portion of the Site.

Analytical Results:

In total, 62 residual/soil samples were collected within the landfill from a total of 16 test pits, six soil borings, and a buried steel drum, and analyzed for PCBs, volatile organic compounds (VOC's), semi-volatile organic compounds (SVOC's), inorganic compounds, pesticides, and dioxins and furans. Elevated concentrations of PCB's were detected in 31 samples, with a maximum concentration of 140 milligrams per kilogram (mg/Kg). Numerous inorganic compounds and pesticides

were detected in several samples above applicable cleanup criteria, whereas benzene, toluene, ethylbenzene, xylene isomers, and pentachlorophenol were detected above industrial and commercial cleanup criteria in isolated instances. Dioxins and furans were detected in each of the three samples analyzed for these parameters. Total toxic equivalency (TEQ) concentrations of dioxins and furans ranged from approximately 141 nanograms per kilogram (ng/Kg) to 2,241 ng/Kg. The maximum TEQ for dioxin detected (2,241 ng/Kg) exceeds state of Michigan Residential, Commercial I, Commercial II, Commercial III, and Industrial Criteria.

Soil/residual samples were collected from soil and monitor well borings that were conducted outside the landfill perimeter, and from two sediment cores collected in the former powerhouse discharge channel immediately adjacent to the east side of the landfill. Elevated PCB concentrations were reported in 24 of the 45 samples analyzed, including both samples collected from the former powerhouse discharge channel, with a maximum concentration of 158 mg/Kg. Elevated concentrations of inorganic compounds were also detected in several samples at levels exceeding applicable criteria. Trace concentrations of VOC's, SVOC's, and pesticides were also reported.

Attachments 2 and 3 include analytical data tables from Technical Memorandum 8 and the RI report that summarizes the soil/residual sample results. Figure 3 depicts the sample locations, with the exception of the sediment samples that were collected in the former powerhouse discharge channel at a location approximately 25 feet northeast of DB-14. Figure 3 also illustrates the approximate extent of visible paper residuals that are contiguous with the landfill.

In 1993, groundwater samples were collected from 15 monitor wells and analyzed for VOC's, SVOC's, inorganic compounds, pesticides, and PCB's. PCB's were not detected and all other results were either non-detect or below Industrial and Commercial Drinking Water Criteria and Groundwater Surface Water Interface (GSI) Criteria, with the exception of bis(2-Ethylhexyl) phthalate, which was detected in groundwater at a concentration of 290 micrograms per liter (ug/L). In 1995, a second round of groundwater samples was collected from each monitor well. Groundwater analyses was limited to PCB's only, and results indicated non-detectable concentrations.

Three leachate wells were sampled in 1993 and again in 1995. Analytical results from the 1993 sampling event indicate that trace concentrations of various VOC's, SVOC's, and Aldrin were present as well as an elevated concentration of toluene (680 ug/L) in leachate collected from LH-2. The toluene concentration exceeds GSI

Criteria. In 1995 leachate samples were analyzed only for PCB's. Results indicate that leachate collected from leachate well LH-1 had PCB concentrations of 1.4 ug/L.

F. SUMMARY OF SITE RISKS

In 1994, a baseline risk assessment was conducted for the KHL-OU3, another OU in the Site, to evaluate risks to human health under unremediated conditions. Due to the similarities between the KHL-OU3 and the 12th St.-OU4, such as similar waste (i.e., PCB-contaminated residuals generated from the same paper recycling process at similar concentrations), identical routes of exposure, and identical receptors, it was assumed that there was a similar level of unacceptable risk at the 12th St.-OU4. Consequently, an OU-specific risk assessment was not conducted for 12th St.-OU4.

A Site-wide Baseline Ecological Risk Assessment (BERA) was however, completed in June 1999 (subsequently amended in August 2000). Although the BERA is currently being revised by the MDEQ and the United States Environmental Protection Agency (U.S. EPA), results of the BERA continue to indicate that PCB concentrations in surface water, in-stream sediments, and floodplain sediments that can erode into an aquatic environment and which are present at the 12th St.-OU4, exceed threshold levels that are protective of ecological health. A Human Health Risk Assessment (HHRA) that is currently being completed also indicates that there is an unacceptable risk for ingestion of biota from the Kalamazoo River. Listed below is a summary of risks.

1. Human Health Risks

Based on the setting of the 12th St.-OU4 and the known existing conditions, PCBs are the primary threat. Possible exposure pathways include incidental ingestion and dermal contact with surface soil, sediment, and residuals by on-site workers, trespassers and anglers; inhalation of airborne particulates by on-site workers; and, ingestion of fish.

As previously explained, the King Highway Landfill Risk Assessment was used to estimate the risks associated with incidental ingestion, dermal contact, and inhalation exposure scenarios. The HHRA being completed summarizes the human health risks. PCB concentrations detected at the 12th St.-OU4 exceed the threshold levels identified in the HHRA, and exceeds applicable criteria outlined in the NREPA.

2. Environmental Risks

The primary habitat in the vicinity of the 12th St.-OU4 is the Kalamazoo River and associated extensive wetlands and the woodland. The landfill sides, upslope from the Kalamazoo River, are part of the ecosystem encompassed by the Kalamazoo River, woodland, and wetlands. There are no barriers to prevent fauna movement to the landfill, woodland, wetlands, adjacent property, or river that have been impacted by PCB releases from the landfill, all of which provide habitat for terrestrial and aquatic species.

The aquatic flora and fauna in the vicinity of the 12th St.-OU4 are typical of the area. Most aquatic wildlife species are generally associated with the adjacent river and wetlands. The aquatic habitat of the river and wetlands adjacent to the landfill provide support for development of various life stages of fish, turtles, and amphibians.

Terrestrial wildlife species which inhabit the 12th St.-OU4 include small mammals (e.g., mice, squirrels, woodchucks, mink, raccoons, fox, and muskrats) and birds, especially passerines and waterfowl. The Kalamazoo area is part of a major migratory flyway route for waterfowl species, and the area surrounding the 12th St.-OU4 is a migratory stopover that attracts and supports waterfowl. During nesting season, vegetation in the area provides cover and materials for nesting. Larger mammals, such as white-tailed deer, also use the 12th St.-OU4 as indicated by the deer paths running over the top and along the sides of the landfill. Muskrat dens have been observed in the wetlands and there is evidence of extensive burrowing into the sides of the landfill by fox and woodchuck.

There is no federally listed endangered or threatened species known to reside within the 12th St.-OU4. Because the 12th St.-OU4 is one of several sources of PCBs to the rest of the Site, it is important to consider the federally listed endangered or threatened species that inhabit the entire Site. The federally-listed endangered or threatened species known to reside within the Site are two turtle species that are considered scarce, one snake species that is considered endangered, bald eagles that are considered a threatened species, and four threatened and one scarce plant species.

Total PCB concentrations that were detected at the 12th St.-OU4 in surface water and sediment exceed the state Surface Water Quality Division standards for protection of avian and mammalian wildlife.

Environmental risks associated with exposure to PCBs from the 12th St.-OU4 are listed below.

- Sensitive aquatic biota such as invertebrates and fish, are likely to be adversely affected both directly (direct contact) and indirectly (food chain) by PCBs in surface water and sediment. These effects include mortality, reproductive effects (i.e., failure), decreased populations, and growth retardation for sensitive species.
- PCB contamination of surface water and sediment affects sensitive piscivorous predators, such as mink, through consumption of PCB-contaminated prey. Impaired reproduction of mink and, ultimately, decreases in mink populations are the observed effects of PCB contamination in aquatic prey.
- Other less sensitive piscivorous predators, such as bald eagles, are at risk if fish are consumed and if foraging takes place mostly within contaminated aquatic areas. Bald eagles have successfully nested only three times since 1990 at the Site, producing a total of only five young. This success rate is well below what the U. S. Fish and Wildlife Service considers either a stable or healthy population.
- Terrestrial and semi-aquatic biota are at risk from PCB-contaminated sediment and soil, depending on life history (e.g., foraging behavior, diet, mobility) and sensitivity to PCBs.
- Carnivorous terrestrial species are likely to be at significant risk if foraging is concentrated in riparian areas with PCB-contaminated soil or sediment, and diet consists of prey that reside in PCB-contaminated areas.
- Omnivorous terrestrial species, represented by mice, appear to have moderate potential for risk from PCB-contaminated soil and sediment. These risks would be location-dependent, and would be influenced by diet, season, mobility of consumers, and by the level of contamination in food items.
- Omnivorous birds that consume a substantial amount of vegetation, represented by the robin, may be at risk if consumed terrestrial plants are taken from highly contaminated areas. Consumption of terrestrial

invertebrates such as earthworms is also expected to contribute to total PCB intake.

- Semi-aquatic herbivorous mammals, represented by muskrat, are at risk from PCB contamination because estimated dietary doses exceed recommended threshold values for rats. Muskrats contaminated with PCBs also cause adverse effects to muskrat predators such as mink.

In summary, due to the human health and ecological risks associated with the 12th St.-OU4, the objectives of the RA must address the following risks:

- Human health risks for persons who trespass or work on the 12th St.-OU4.
- Human health and ecological risks due to past migration of PCB from the landfill to the woodland, wetlands, adjacent property, former powerhouse discharge channel, and the Kalamazoo River.
- Human health and ecological risks due to the continuing release of PCB from the landfill to the woodland, wetlands, adjacent property, former powerhouse discharge channel, and the Kalamazoo River.
- Human health and ecological risks due to the potential additional release of PCB to the woodland, wetlands, adjacent property, former powerhouse discharge channel, and the Kalamazoo River caused by failure of the sides of the landfill.

G. DESCRIPTION OF ALTERNATIVES

The MDEQ has relied on the information and analysis contained in the Administrative Record for 12th St.-OU4 and KHL-OU3. General similarities between the KHL-OU3 and this 12th St.-OU4 justifies such an approach. Both landfills contain large quantities of the same type of contaminated paper-making residuals. The type and concentration of PCB contamination is similar for both landfills. The same paper making process (the recycling of carbonless copy paper) led to the generation of the residuals at both locations, and both landfills accepted residuals during approximately the same time period. Finally, each landfill is located adjacent to the Kalamazoo River.

The screening of the alternatives for KHL-OU3 was determined to be applicable to the 12th St.-OU4. During the KHL-OU3 RI/FS, a total of seven potentially applicable technologies that incorporated 60 different process options were screened with respect to technical implementability. Based upon this screening, three potentially applicable technology types, as well as the No Action alternative, were carried forward in the remedy selection process for the KHL-OU3. Based on the analysis in the KHL-OU3 FS evaluation, the MDEQ determined that consolidating the PCB-contaminated material from outside the landfill back into the landfill, and capping and closing the landfill in accordance with Part 115, Solid Waste Management, of the NREPA standards and as specified in this ROD, was protective of human health and the environment.

Based on the information contained in the Administrative Records for both KHL-OU3 and this 12th St. OU4, the MDEQ has formally evaluated the following two alternatives for purposes of this ROD:

Alternative 1: No Action

Development of the No Action alternative is required under the NCP (40 Code of Federal Regulations (CFR) 300.430). It was evaluated as required by the NCP to provide a baseline for comparison of the effectiveness of the remedial alternatives. Under the No Action alternative, no active response measures would occur, and therefore, no risk reduction would result from the No Action alternative.

Alternative 2: Landfill Closure (excavation, containment, and capping in accordance with Part 115, Solid Waste Management, and Part 201, Environmental Remediation, of the NREPA, and restoration of areas affected by the RA).

Alternative 2 provides for relocating residual material that has eroded from the four areas outside the landfill back into the landfill, closure of the landfill in accordance with certain requirements of Part 115, Solid Waste Management, and Part 201, Environmental Remediation, of the NREPA, restoration of areas impacted by the remedial activities, and other requirements which the MDEQ, in consultation with the U.S. EPA, has determined to be necessary to ensure long-term protectiveness of human health and the environment. Closure of the landfill involves: (1) visual identification by the lead agency of PCB containing material and excavation of that material; (2) installing a landfill cap including a flexible membrane liner (FML); (3) construction of a new sidewall containment system (SWCS) with sufficient erosion protection to prevent berm failure under 500 year flood conditions; (4) location of the SWCS at such a distance from the Kalamazoo River/former powerhouse discharge channel to ensure that there can be no hydraulic connection between the Kalamazoo River/former powerhouse discharge channel and the wastes within the landfill during the lifetime of the remedy; and (5) restoration of all areas excavated or

otherwise affected by the RA. In addition, this alternative requires long-term groundwater monitoring to verify the effectiveness of the containment system and an evaluation during remedial design (RD) to determine if methane or leachate production is occurring. If the RD analysis indicates that methane or hazardous leachate is present or likely to occur after construction of the landfill cap, then this alternative will include the installation of a gas venting system and/or a leachate collection system. Wetland mitigation and restoration of excavated areas or areas otherwise affected by the RA activities will also be conducted in accordance with an approved plan. Finally, institutional controls such as deed restrictions, fencing, and sign posting shall be utilized to reduce potential human exposure to soil, residuals, and other media.

The 1997 FS identified capital costs of \$1,655,040 associated with implementing Alternative 2, and annual operation and maintenance (O&M) costs of \$14,000, resulting in a present worth cost of \$1,828,800, based on 1997 dollars. Data indicates that residual material has continued to erode from the landfill since the RI/FS data was collected, and consequently, the volume of residuals in the areas outside the landfill is now approximately 4,000 cubic yards. Consequently, the impacted area is larger than presented in the 1997 FS and costs for clearing and grubbing and excavating the additional area, and wetland mitigation and restoration of affected areas now reflect the larger area. In addition, costs associated with post-excavation sampling to identify the concentration of any remaining PCBs, and some O&M were inadvertently excluded from the 1997 FS. With the aforementioned additional expenses, revised capital costs are \$1,769,238, and O&M costs are \$434,967, resulting in total costs of \$2,204,205 (approximately a 20 percent overall increase from 1997).

Attachment 4 summarizes the costs.

Capital costs consist of direct costs (e.g., construction, equipment, transportation, disposal, analytical, treatment, and contingency) and indirect costs (e.g., engineering, legal, and permitting fees) incurred by implementing a specific alternative. O&M costs refer to long-term, post-construction measures necessary to ensure continued effectiveness of the RA. The O&M costs were developed for the first year of system operation and the 30-year present worth cost analysis. Total net present worth cost is intended to represent the sum of money, if invested in the base year and disbursed as needed, that would be sufficient to cover costs of a remedy over its planned life (assumed to be 30 years for comparison purposes).

This alternative is estimated to take approximately one year to reach construction completion.

H. SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES

In accordance with the NCP, the relative performance of each alternative is evaluated using the nine criteria (Section 300.430 (e)(9)(iii)) of the NCP as a basis for comparison. The purpose of the evaluation process is to determine which alternative: (a) meets the threshold criteria of overall protection of human health and the environment and attainment of Applicable or Relevant and Appropriate Requirements (ARARs), (b) provides the "best balance" with respect to the five balancing criteria of 40 CFR § 300.430(e)(9)(iii)(C)-(G), and (c) takes into consideration the acceptance of the support agency (here, the U.S. EPA) and the community.

As noted above, the MDEQ relied on the comparative analysis performed in connection with the KHL-OU3 to reach a remedy decision for this 12th St.-OU4. A formal analysis under the NCP of alternatives in this decision document would result in the same conclusion as those for the KHL-OU3 FS and ROD, and therefore was not conducted in order to prevent a duplication of effort.

1. Threshold Criteria

a. **Overall Protection of Human Health and the Environment** addresses whether a remedy provides adequate protection of human health and the environment and describes how risks posed through each exposure pathway are eliminated, reduced, or controlled through treatment, engineering, or institutional controls. The selected remedy must meet this criterion.

The major exposure pathways of concern at the 12th St.-OU4 are ingestion, inhalation, and dermal contact with PCB-contaminated soils, sediments, or residuals in the landfill or in the areas outside the landfill; dermal contact with PCB-contaminated surface water; and ingestion of fish.

Alternative 2 would provide adequate protection of human health and the environment by controlling the mobility of contaminants through engineering and institutional controls. A cap would serve as a barrier to human and wildlife contact with the residuals. An adequate cap would also decrease the rate of precipitation infiltration, thereby reducing the likelihood of formation of new leachate and the potential for PCBs to migrate into groundwater. Construction of new berms would prevent release of PCBs due to side failure. Excavation using visual criteria to remove residuals from the landfill sides, woodland, wetlands, adjacent property, and in a portion of the former powerhouse

discharge channel, and relocating the residuals back into the landfill prior to the construction of the cap, will reduce the potential for exposure and migration of PCBs into the environment. A buffer zone will be established between the toe of the newly constructed berm and the former powerhouse discharge channel in order to ensure that, for the lifetime of the remedy, no hydraulic connection exists between the landfill and the Kalamazoo River/former powerhouse discharge channel.

The No Action alternative does not provide adequate protection because it does not address the existing unacceptable human health and ecological risks associated with the 12th St.-OU4.

- b. **Compliance with ARARs** addresses whether a remedy meets ARARs set forth in federal and state environmental laws and/or justifies a waiver from such requirements.

ARARs for this RA include the following:

- Surface water quality standards contained in Part 31, Water Resources Protection, of the NREPA.
- Rules established pursuant to Part 31, Water Resources Protection, of the NREPA regarding permit requirements.
- Site-specific pollutant limitations and performance standards which are designed to protect surface water quality contained in the federal Clean Water Act (CWA).
- Regulations prohibiting unauthorized obstruction or alteration of any navigable water in the United States (dredging, fill, cofferdams, piers, etc.) contained in the federal River and Harbor Act.
- Regulations regarding the dredging or filling of lakes or stream bottoms contained in Part 301, Inland Lakes and Streams, of the NREPA.
- Rules prescribing soil erosion and sedimentation control plans, procedures, and measures contained in Part 91, Soil Erosion and Sedimentation Control, of the NREPA.

- Rules prohibiting the emissions of air contaminants in quantities which cause injurious effects to human health, animal life, plant life of significant economic value, and/or property contained in Part 55, Air Pollution Control, of the NREPA.
- National ambient air quality standards contained in the federal Clean Air Act.
- Statutory provisions and rules specifying environmental response, risk assessment, RA, and site cleanup criteria pursuant to Part 201, Environmental Remediation, of the NREPA.
- Certain regulations regarding the construction, operation, and closure of sanitary landfills, solid waste transfer facilities, and solid waste processing plants pursuant to Part 115, Solid Waste Management, of the NREPA.
- Effluent standards for toxic compounds including PCBs contained in the federal WPCA Toxic Pollutant Effluent Standards.
- Regulations regarding activities in wetlands found in Part 303, Wetland Protection, of the NREPA.
- Federal regulations under the Toxic Substances Control Act (TSCA) regarding the risk-based disposal of PCB remediation waste, 40 CFR § 761.61(c).

Requirements of the above ARARs will be met by Alternative 2.

The No Action alternative does not meet the ARARs.

2. Primary Balancing Criteria

c. **Long-term Effectiveness and Permanence** refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time once cleanup goals have been met.

Alternative 2 would provide long-term effectiveness via isolation of the residuals by capping and containment. The RA for the landfill will be considered a final action. Long-term O&M and monitoring of the landfill must be provided to ensure that the remedy maintains its ability to protect human health and the

environment over time. A final decision on whether additional response actions are necessary for the areas outside the landfill that are part of this RA will be made as part of the ROD for the Phase I portion of the Kalamazoo River.

The No Action alternative does not meet the long-term effectiveness and permanence criteria.

d. Reduction of Toxicity, Mobility, or Volume Through Treatment addresses the statutory preference for selection of RA that employ treatment technologies that permanently and significantly reduce toxicity, mobility, or volume through treatment of the hazardous substance as a principal element.

As detailed above, the stated programmatic goal of the U.S. EPA, as expressed in the NCP, is to select remedies that are protective over time and “minimize untreated waste”, Section 300.430 (a)(1)(i). The NCP states that the U.S. EPA will use “treatment to address the principal threats at a site, wherever practicable”, Section 300.430 (a)(1)(iii)(A). This preference is satisfied when treatment is used to reduce the principal threats at a site through destruction of toxic contaminants, reduction of total mass of toxic contaminants, irreversible reduction in contaminant mobility, or reduction of total volume of contaminated media.

Alternative 2 would not result in the reduction in the toxicity, mobility, or volume of contaminants through treatment. The employment of treatment technologies at this OU was not found to be practicable. Alternative 2 will, however, achieve significant reductions of the mobility of the contaminants at this OU through containment, and this reduction in mobility will endure for as long as the integrity of the containment system is maintained.

The No Action alternative does not reduce toxicity, volume, or mobility.

e. Short-term Effectiveness considers the time to reach cleanup objectives and the risks an alternative may pose to site workers, the community, and the environment during remedy implementation. This criterion also considers the reliability and effectiveness of any mitigative measures taken during remedy implementation to control those short-term risks.

It is estimated that once construction is started, Alternative 2 could be completed in approximately one year. Alternative 2 has some potential short-term negative impacts. For example, truck traffic during cap construction may increase noise and dust in the vicinity of the landfill, however, air monitoring will be required and

protective controls will be implemented to suppress dust in order to comply with federal and state air quality standards. The use of erosion controls will be used to mitigate any short-term effects posed by potential siltation and contaminant release to the Kalamazoo River. Health and safety precautions will be undertaken to reduce the likelihood of accidents during construction and to protect site workers and the community from unacceptable exposures to hazardous substances. The discharge of treated water to the surface water of the Kalamazoo River or to the Kalamazoo Wastewater Treatment Plant will be in accordance with a National Pollutant Discharge Elimination System (NPDES) permit. This permit will establish discharge criteria (as administered by the state under Part 31, Water Resources Protection, of the NREPA), that are set at protective levels.

f. **Implementability** is the technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement a particular option.

No significant implementation problems are projected for Alternative 2. Cap and containment system materials are expected to be obtainable from nearby sources and standard construction methods will be used. All necessary excavation and NPDES permits, or any other required permit can be obtained from the federal or state governments. Excavation firms are available to install sheetpile and remove the residual material from the wetlands, woodland, adjacent property, and the portion of the former powerhouse discharge channel that contains residuals that have eroded from the landfill. Environmental controls will be implemented to prevent air emissions to the atmosphere or migration of PCBs to the river during excavation and cap and containment system construction.

g. **Cost** listed below in Table 1 include estimated capital and O&M costs, also expressed as net present worth. The O&M will need to be continued for the lifetime of the remedy because the remedy leaves hazardous waste at the 12th St.-OU4.

TABLE 1

Estimated Cost of Remedial Alternatives for the 12th St.-OU4

ALTERNATIVE	capital	O&M (30 YEARS)	PRESENT WORTH
1. No Action	None	None	None
2. Excavate, cap and contain, wetland mitigation	\$1,769,238	\$434,967	\$2,204,205

3. Modifying Criteria

h. **Support Agency Acceptance** addresses whether or not the support agency agrees with, or objects to, any of the remedial alternatives.

The U.S. EPA, as the support agency for the Site, agrees that **Alternative 2** is protective of human health and the environment.

i. **Community Acceptance** addresses the public's general response to the remedial alternatives and to the Proposed Plan. Specific responses to public comments are addressed in the attached Responsiveness Summary.

I. THE SELECTED REMEDY

Based upon the evaluation of the RI/FS completed in connection with this 12th St.-OU4, the RI/FS completed in connection with the KHL-OU3, other analyses performed in connection with the Kalamazoo River OU, and the nine criteria for remedy selection contained in the NCP, the MDEQ selects Alternative 2 as the remedy for the 12th St.-OU4. The RA shall insure that unacceptable exposure to PCBs will not occur. Construction details for Alternative 2 shall be part of the RD.

1. Excavation

Prior to any excavation in the woodland, wetlands, adjacent property, or the former powerhouse discharge channel, the horizontal and vertical extent of the PCB contamination shall be determined based on field reconnaissance and/or sample analyses. The east side of the landfill, along the former powerhouse

discharge channel and the river, shall also be excavated and relocated further into the landfill. The excavation shall be extensive enough to create an adequate buffer zone to ensure that, for the lifetime of the remedy, no hydraulic connection exists between the PCB-contaminated wastes within the newly constructed landfill containment system and the Kalamazoo River/former powerhouse discharge channel. This buffer zone shall take into account potential changes in the direction and current of the river's flow. This buffer zone shall be of sufficient size to allow for the installation of and access to groundwater monitoring wells and to provide for a hydraulic separation between the waste and the surface water.

An excavation work plan shall be submitted to the lead agency for review and approval prior to initiating any excavation activity. The excavation work plan shall be based on the results of the pre-excavation sampling and/or field reconnaissance and shall include air and surface water monitoring provisions. Subsequent to work plan approval, all excavated material will be dewatered as necessary and disposed of in the landfill prior to construction of the cover and containment system.

Following post-excavation sampling, a determination whether additional response actions will be necessary for the areas outside that landfill will be made as part of the ROD for the Phase I portion of the Kalamazoo River.

Short-term surface water monitoring shall be conducted during all construction activities and excavation of materials from the landfill, woodland, wetlands, adjacent property, and the former powerhouse discharge channel in accordance with an approved monitoring plan. Surface water monitoring shall be conducted in order to assure that public health, safety, welfare, and the environment are being protected in accordance with state and federal law during implementation of excavation activities.

Air monitoring may be necessary during the RA activities. This monitoring may be necessary to ensure that the RA activities do not violate the rules prohibiting the emission of air contaminants in quantities which have injurious effects on human health, animal life, plant life of significant economic value, and/or property as established in Part 55, Air Pollution Control, of the NREPA.

Upon completion, the excavated areas shall be restored to their natural condition in accordance with an approved plan. Soil erosion shall be controlled compliant with state law during remedy implementation. Restoration of the wetlands

pursuant to Part 303, Wetlands Protection, of the NREPA, shall also be carried out.

2. Cap

Under Alternative 2, a cap shall be placed in the landfill portion of the 12th St.-OU4 in compliance with the appropriate requirements of Part 115, Solid Waste Management, of the NREPA concerning cap specifications for closure of a solid waste disposal facility. The construction of the cap over the landfill will minimize infiltration of precipitation through the landfill and migration of PCB from the landfill into the groundwater, woodland, wetlands, adjacent property, and the former powerhouse discharge channel. The cap consists of the following components from bottom to top.

A layer of select granular fill at least six inches thick, from an off-site source, having a minimum hydraulic conductivity of 1×10^{-3} centimeters per second, shall be placed on top of the landfill as a suitable sub-grade for the cap. The need for a gas venting system will be evaluated in the RD process. If it is determined that a gas venting system is needed, this layer will be modified as approved by the MDEQ to also act as a gas venting layer. If so modified, this gas venting layer shall be designed to collect landfill gas (methane) and route it to a passive venting system. If it is determined that a gas venting system is required, it shall be monitored pursuant to an approved monitoring plan to determine whether emissions may cause potential health effects. If potential health effects are indicated, an emission treatment system shall be placed in the venting system as directed by the lead agency to reduce the emissions to acceptable levels. A polyvinyl chloride (PVC) geomembrane liner at least 30 mils thick, or its equivalent, will be placed over the select granular fill.

A general fill (protective) layer at least 24 inches thick will be placed above the 30-mil PVC, geomembrane liner. The protective layer will be capable of sustaining the growth of non-woody plants, and shall have adequate water holding capacity. The water that accumulates within this layer will drain to a sedimentation outlet structure and discharge to the Kalamazoo River.

A vegetative (erosion) layer at least six-inches thick will be placed over the protective layer. The vegetative layer will be designed to promote vegetative growth, provide surface water runoff, and minimize erosion. The feasibility of using vegetation that would provide habitat, such as native grasses, will be addressed in the RD.

3. Erosion Protection

Erosion protection shall be placed on the newly constructed side walls of the landfill. This protection shall be sufficient to protect the side walls from a 500-year flood event. The erosion protection shall extend, at a minimum, to an elevation of 707.0 feet above mean sea level (MSL), which is approximately two feet above the 100-year flood elevation.

Placement of erosion and flood protection on the side walls of the landfill is consistent with requirements of Part 115, Solid Waste Management, Part 301, Inland Lakes and Streams, Part 91, Soil Erosion and Sedimentation Control, and Part 303, Wetlands Protection, of the NREPA.

4. Installation of Groundwater Monitoring System

Groundwater monitoring wells will be installed and wells that are no longer necessary will be properly abandoned. This groundwater monitoring system will be designed to detect any groundwater contamination from the landfill and will be developed as part of the RD in accordance with Part 201, Environmental Remediation, of the NREPA.

5. Long-Term Monitoring

Long-term groundwater monitoring shall be performed in accordance with an approved groundwater monitoring plan. The plan may require the installation of additional monitoring wells. The continued need for monitoring will be evaluated at the five-year review required under the NCP, and at each review thereafter, but shall continue until the lead agency, in consultation with the support agency, determines that such monitoring is no longer necessary. Monitoring of the groundwater aquifer under the landfill shall be conducted in accordance with Part 201, Environmental Remediation, of the NREPA.

6. Engineering Controls - Fencing

After the RA is completed, fencing shall be installed around the entire landfill portion of the 12th St.-OU4 in accordance with approved work plans.

7. Containment System

A containment system shall be constructed around the outside of the landfill. The existing sides of the landfill are constructed of sand, fly ash, and PCB-contaminated residuals. These sides were not designed to provide side slope stability, flood protection, or erosion control. The existing sides will be completely covered by the new containment system. The containment system shall be designed to prevent release of any PCB contamination. It must provide appropriate slope stability and flood and erosion protection. The containment system shall be designed, at a minimum, to meet the relevant provisions of Michigan Solid Waste Landfill closure regulations pursuant to Part 115, Solid Waste Management, of the NREPA. The containment system must be approved prior to construction.

8. Leachate Collection

During RD, an evaluation of the need for a leachate collection system shall be submitted for approval. The evaluation, at a minimum, shall consider the water content of the waste, the presence of perched water within the landfill, and the potential and effect of waste settlement.

If it is determined that leachate collection is necessary, a leachate collection system as specified by the lead agency shall be included in the final design and it shall be operated to assure that the public health, safety and welfare, and the environment are adequately protected.

9. Posting and Permanent Marker(s)

Permanent marker(s) shall be placed at the landfill describing the restricted area of the 12th St.-OU4 and the nature of any restrictions. Warning signs will also be posted on the fence every 200 feet and on all entry gates. The number, content, and location of the permanent markers and warning signs shall be approved by the lead agency.

10. Deed Restrictions

Deed restrictions approved by the lead agency shall be placed on the landfill area property to regulate future use of the landfill to protect public health, safety and welfare, and the environment.

11. Long-term Maintenance

Long-term maintenance, post-closure care, and financial assurance as required by Part 201, Environmental Remediation, of the NREPA, shall be provided as part of this RA. A detailed O&M Plan shall be submitted as part of the RD. Once approved, long-term O&M shall be carried out pursuant to the plan.

12. Other Provisions

Measures will be taken during remedy construction activities to minimize the noise and dust impacts of construction upon the surrounding community. Fugitive dust emissions will be monitored and controlled in a manner to ensure that they comply with the standards contained in Part 55, Air Pollution Control, of the NREPA.

13. Five-Year Review

Because this remedy will result in hazardous substances remaining on-site above health-based and ecological-based levels, a review will need to be conducted within five years after commencement of the RA, and every five years thereafter. This review will be done to evaluate whether the remedy continues to provide adequate protection of human health and the environment and determine if any additional action is needed for the remedy to be protective.

J. STATUTORY DETERMINATIONS

As explained at length below, the selected remedy is consistent with the requirements of Section 121 of CERCLA to:

1. Protect human health and the environment.
2. Comply with ARARs.
3. Be cost-effective.
4. Utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable.

Although the selected remedy does not satisfy the CERCLA's preference for treatment as a principal element of the remedy, such treatment was not considered necessary to ensure protectiveness at this 12 St.-OU4.

1. Protection of Human Health and the Environment

The presence of PCBs at concentrations exceeding applicable criteria and ecological and human health based threshold values in areas outside the landfill is evidence of past and on-going releases. The possibility of failure of the sides of the landfill, especially the side between the landfill and the Kalamazoo River including the former powerhouse discharge channel, is recognized as a threatened future release of PCBs into the environment. The on-going release of PCBs to the environment is occurring from the PCB-contaminated residuals, soils, and sediments located in the landfill, woodland, wetlands, adjacent property, and the former powerhouse discharge channel. The data from the Lake Michigan Mass Balance Study indicates that at least 30 kilograms per year of PCB is being discharged from the Site into Lake Michigan. This action will reduce and control the migration of PCBs from the 12th St.-OU4.

Following consolidation of the excavated material, the cap and containment system will provide a barrier that will control or eliminate the PCB exposure pathways, and will reduce precipitation infiltration through the residuals over time, thereby reducing the potential for additional leachate formation. The containment system will eliminate the erosion of contaminated material from the landfill. Engineering and institutional controls in the form of fencing and posting, along with deed restrictions, will further reduce the likelihood of human exposure to PCBs at the 12th St.-OU4.

No unacceptable short-term risks or cross-media impacts will be caused by implementation of the remedy. As mentioned above, mitigative measures will be taken during excavation and construction activities to minimize noise and dust, siltation and contaminant release to the Kalamazoo River and surrounding community.

2. Compliance with ARARs

The selected remedy will comply with the federal and/or state ARARs (categorized as chemical-specific, location-specific, and action-specific) listed below.

a. **Chemical-specific ARARs**

Chemical-specific ARARs regulate the release of specific substances which have certain chemical characteristics. Chemical-specific ARARs typically determine the extent of cleanup at a site.

Federal Chemical-Specific ARARs:

TSCA

TSCA's PCB Remediation Waste Rule, 40 CFR § 761.61 et seq. provides cleanup and disposal options for PCB remediation waste. PCB remediation waste is that waste containing PCBs as a result of the spill, release, or other unauthorized disposal at a concentration, for purpose of this OU, equal to or greater than 50 ppm.

The Remedial Alternative selected in this ROD provides for disposal of the PCB remediation waste at this OU by means of the risk-based disposal method provided in 40 CFR § 761.61(c). This federal regulation allows the U.S. EPA Superfund Division Director, in consultation with the TSCA program, under which disposal is to occur, to make a determination that a proposed disposal method will not pose an unreasonable risk of injury to health or to the environment.

Through its request for concurrence on this ROD to the U.S. EPA Superfund Division Director, in consultation with the TSCA program, the MDEQ has applied pursuant to 40 CFR § 761.61(c)(1) for approval of the proposed disposal method, i.e. consolidation of the wastes and capping. During the RI/FS process for this 12th St.-OU4, the MDEQ has submitted to the U.S. EPA the information described in the notification required by 40 CFR § 761.61(a)(3), or its equivalent. The concurrence of the Region 5 Superfund Division Director, in consultation with the TSCA program, with the remedy selected in this ROD represents the U.S. EPA's written approval, pursuant to 40 CFR § 761.61(c)(2), of the MDEQ's application, and U.S. EPA's concurrence with the MDEQ's conclusion that the method of disposal selected in this ROD will not pose an unreasonable risk of injury to health or to the environment.

The conclusion that the consolidation and capping disposal method proposed in this ROD does not pose an unreasonable risk of injury to human health or to the environment is supported by all of the data collected in the RI. As an initial matter, most of the contaminated materials that will be disposed of in the landfill are not, by definition, PCB remediation wastes because the level of PCB contamination is below 50 ppm. The contaminated residuals in the landfill have had the opportunity to naturally settle for many years. The base of the contaminated residuals will have had time to dewater and establish a dense low hydraulic conductivity zone. Tests show that the residuals are relatively impermeable. These factors should reduce the likelihood that leachate, if produced can escape from the new landfill. In any event, soil investigations to be conducted during the RD phase of this

remedy will establish whether leachate is present or will be generated by compressing the residuals. The risk of leachate release will be evaluated and, if hazardous leachate is present in quantities that should be addressed, this remedy provides for installation of a leachate collection system.

The proposed cap will ensure that terrestrial biota are no longer exposed to the PCB-contaminated wastes in the landfill. The sides and slopes of the landfill will be constructed to withstand flooding that statistically occurs only once in every 500 years. This construction standard, along with the buffer zone that will be created between the former powerhouse discharge channel and the landfill, should ensure that the aquatic biota in the Kalamazoo River are no longer exposed to PCB-contaminated materials eroding from the landfill area. In short, no significant reduction in long-term risks to human health and the environment would be achieved by disposing of these contaminated materials off-site. In fact, off-site disposal carries the potential of additional short-term risks to excavation and transportation personnel.

In summary, this remedial alternative will achieve the TSCA ARAR by implementing a risk-based disposal method. The disposal method selected in this ROD comprises: (1) consolidation of the PCB-contaminated materials into the existing landfill area; (2) the creation of a buffer zone between the former powerhouse discharge channel and the landfill; (3) capping of the landfill in a manner that complies with all applicable Michigan requirements; and (4) if necessary, installation of a leachate collection system. This disposal method will pose no unreasonable risk to human health or the environment.

CWA - Ambient Water Quality Criteria:

This act and criteria establish monitoring requirements for the discharge of waste treatment effluents to waters of the United States. They are applicable to the surface water discharges resulting from excavation and dewatering of soils, sediments, or residuals from the former powerhouse discharge channel, wetlands, woodlands, and adjacent property.

Federal WPCA - Toxic Pollution Standards:

This act would be applicable to the discharge to the Kalamazoo River of water from all dewatering activities.

State Chemical-Specific ARARs:

Part 201, Environmental Remediation, of the NREPA provides for the identification, risk assessment, evaluation, and remediation of contaminated sites within the state; therefore, Part 201, Environmental Remediation, of the NREPA is applicable to the 12th St.-OU4. The statute and its rules provide, *inter alia*, that RAs shall be protective of human health, safety and welfare, and the environment of the state. Part 201, Environmental Remediation, of the NREPA, in particular those in Section 20120a and 20120b, specifies that a RA shall achieve a degree of protectiveness appropriate for the use of the property, in this case, the 12th St.-OU4.

Part 31, Water Resources Protection, of the NREPA establishes effluent standards in accordance with the federal WPCA and the CWA, and also establishes rules specifying standards for several water quality parameters including PCBs. Part 31, Water Resources Protection, of the NREPA, would be applicable to the discharge of water from the site to the Kalamazoo River.

b. Location-Specific ARARs

Location-specific ARARs are those requirements that relate to the geographical position of a site. These include:

State Location-Specific ARARs:

Part 115, Solid Waste Management, of the NREPA:
Part 115, Solid Waste Management, of the NREPA contains regulations regarding the construction, operation, and closure of sanitary landfills, solid waste transfer facilities, and solid waste processing plants.

c. Action-Specific ARARs

Action-Specific ARARs are requirements that define acceptable treatment and disposal procedures for hazardous substances.

*Federal Action-Specific ARARs:***CWA:**

The CWA establishes site-specific pollutant limitations and performance standards that are designed to protect surface water quality. Types of discharges regulated under the CWA include discharge to surface water, indirect discharge to a publicly owned treatment works (POTW), and

discharge of dredge or fill materials to United States waters. This act is relevant to the treatment and discharge of water to the Kalamazoo River or POTW from the dewatering operations.

Rivers & Harbor Act:

The Rivers & Harbor Act prohibits unauthorized obstruction or alteration of any navigable water in the United States (dredging, fill, cofferdams, etc.). It also requires that federal agencies, where possible, avoid or minimize adverse impacts of federal actions upon wetlands and floodplains.

Remedial activities, which may require a permit to perform, must be conducted in such a way that they will avoid unacceptable obstruction or alteration of the Kalamazoo River channel.

Clean Air Act:

The Clean Air Act establishes requirements for constituent emission rates in accordance with national ambient air quality standards. Excavation and cap construction activities will be regulated by the Clean Air Act.

TSCA:

TSCA's PCB Remediation Waste Rule, 40 CFR, Section 761.61 provides the requirements for the disposal of PCB-contaminated wastes, and would therefore be applicable to this remedy.

State Action-Specific ARARs:

Part 91, Soil Erosion and Sedimentation Control, of the NREPA:

This part regulates earth changes, including cut and fill activities which may contribute to soil erosion and sedimentation of surface water.

Part 91, Soil Erosion and Sedimentation Control, of the NREPA would apply to any such activity where more than one acre of land is affected or the regulated action occurs within 500 feet of a lake or stream. Part 91, Soil Erosion and Sedimentation Control, of the NREPA would be applicable to the cap construction activities since these actions could impact the Kalamazoo River, which is less than 500 feet from the 12th St.-OU4.

Part 301, Inland Lakes and Streams, of the NREPA:

Part 301, Inland Lakes and Streams, of the NREPA regulates the dredging or filling of lake or stream bottoms. Activities associated with the selected remedy, sediment removal, and berm stabilization are regulated under this part due to the proximity of the 12th St.-OU4 to the Kalamazoo River.

Part 115, Solid Waste Management, of the NREPA:

Part 115, Solid Waste Management, of the NREPA contains regulations regarding the construction, operation, and closure of sanitary landfills, solid waste transfer facilities, and solid waste processing plants.

Part 31, Water Resources Protection, of the NREPA:

Part 31, Water Resources Protection, of the NREPA establishes rules regarding water and wastewater discharges. This is applicable for discharge of waters to the Kalamazoo River. Part 31, Water Resources Protection, of the NREPA also includes the rules regarding permit requirements for discharges.

Part 55, Air Pollution Control, of the NREPA:

Rules prohibiting the emission of air contaminants in quantities which have injurious effects on human health, animal life, plant life of significant economic value, and/or property are established in Part 55, Air Pollution Control, of the NREPA. This would be applicable to excavation and cap construction activities. During the construction of the RA, the total emissions from the entire site shall comply with the secondary risk screening level (SRSL) for PCB. The SRSL for PCB based upon an incremental cancer risk of 1 in 100,000 is 0.02 ug/m^3 (micrograms per cubic meter) applied at the 12th St.-OU4 perimeter. At a perimeter location where the adjacent property is an industrial property or a public roadway, Rule 225 (3)b allows for compliance with the SRSL multiplied by a factor of 10. Where the adjacent property is not an industrial property or public roadway, the perimeter location shall comply with the SRSL.

Michigan Occupational Safety and Health Act 154 (MIOSHA):

MIOSHA establishes the rules for safety standards in the work place and is applicable to the remediation activities.

Part 201, Environmental Remediation, of the NREPA:

Part 201, Environmental Remediation, of the NREPA provides for the evaluation and remediation of contaminated sites within the state. The MDEQ has determined that Part 201, Environmental Remediation, of the NREPA is applicable to the 12th St.-OU4. Part 201, Environmental Remediation, of the NREPA requires that RAs be protective of human health, safety and welfare, and the environment.

Part 303, Wetland Protection, of the NREPA:

Regulates activities conducted in wetlands as well as mitigation of wetlands.

3. Cost-Effectiveness

The selected remedy for the 12th St.-OU4 has the least cost of those remedies that provides an acceptable degree of protectiveness, compared to the other alternatives evaluated formally in this ROD and informally through analysis and comparison with the alternatives considered as part of the KHL-OU3 remedy selection process. Capital costs are the direct and indirect costs and O&M costs refer to long-term, post-construction measures necessary to ensure continued effectiveness of a RA. Total net present worth cost represents the sum of money, if invested in the base year and disbursed as needed, that would be sufficient to cover costs of a remedy over its planned life (assumed to be 30 years for comparison purposes).

Alternative 2 will be effective in the long-term due to the significant reduction of the mobility of the PCBs achieved through excavation of residuals that are contiguous with the landfill and containment of these materials with the materials in the landfill.

4. Utilization of Permanent Solutions and Alternative Treatment Technologies to the Maximum Extent Practicable

The state of Michigan has determined that the selected remedy provides the best balance in terms of long-term effectiveness and permanence, reduction of toxicity, mobility, or volume of contaminants through treatment, short-term effectiveness, implementability, and cost, taking into consideration acceptance by the U.S. EPA and the community.

The selected remedy includes excavation of residual material from the woodland, wetlands, adjacent property, and from the portion of the former powerhouse discharge channel where residuals have eroded into the channel from the landfill; relocation of these materials back into the landfill; installation and maintenance of a landfill containment system; restoration of areas affected by the RA; groundwater monitoring; gas venting and/or leachate collection systems (if necessary), and access and land use restrictions.

5. Preference for Treatment as a Principal Element

The state of Michigan believes that the selected remedy is protective of human health and the environment and utilizes permanent solutions and alternative technologies to the extent practicable. The remedy, however, does not satisfy the statutory preference for treatment of the hazardous substances present as a principal element because additional treatment of the source areas of the landfill would not be practicable and too costly as compared to ensuring the long-term containment of the hazardous substance at the site.

6. Five-Year Review Requirements

Because this remedy will result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of the RA to ensure that the remedy is, or will be, protective of human health and the environment.

K. SUMMARY

The selected remedy will satisfy the statutory requirements established in Section 121 of the CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986, to protect human health and the environment. It complies with all ARARs, will provide overall effectiveness appropriate to its costs and will use permanent solutions and alternative treatment technologies to the maximum extent practicable. Treatment is not a component of the selected remedy because an attempt to treat the PCBs in the soils, sediments, and residuals at the 12th St.-OU4 would not provide sufficient additional risk reduction in relation to increased cost.

II. RESPONSIVENESS SUMMARY

The public participation requirements of the CERCLA Sections 113 (k)(2)(i-v) and 117 have been met during the remedy selection process. Section 113 (k)(2)(i-v) and 117 of the CERCLA require the state as the lead agency to respond "to each of the significant comments, criticisms, and new data submitted in written or oral presentations" on a Proposed Plan for an RA. The Responsiveness Summary addresses the concerns expressed by the public, PRPs, and governmental bodies in written and oral comments received by the MDEQ regarding the preferred alternative for the 12th St.-OU4. The public supports the preferred alternative.

OVERVIEW

The MDEQ has established the Citizens Advisory Committee (CAC) and the Government Advisory Committee (GAC) to enhance public participation. The CAC is comprised of local residents and the GAC is comprised of all interested elected officials from local, state, and federal governments. A list of meeting dates, attendees, and topics discussed at each meeting concerning the 12th St.-OU4 can be found in Attachment 1 of this ROD.

At the time of the public comment period, the MDEQ as lead agency, in consultation with the U.S. EPA, the support agency, had proposed a preferred alternative for the 12th St.-OU4. The preferred alternative addresses the PCB-contaminated soils, sediments, and residuals associated with the 12th St.-OU4. The preferred alternative specified in the ROD includes relocating PCB-contaminated material back into the landfill, capping and containment of the landfill, restoration of affected areas, and long-term monitoring. Prior to construction of the containment system, the PCB-contaminated soils, sediments, and residuals from the landfill sides, woodland, wetlands, adjacent property, and residuals in the former powerhouse discharge channel that are contiguous with the landfill, will be excavated and returned to the landfill.

Based on the comments received during the public comment period, the selected alternative was generally supported. The residents would prefer not to have a non-productive zone (i.e., the closed landfill) in their community and their comments dealt with issues of the long-term effectiveness of the selected alternative. The PRPs generally support the preferred alternative.

These sections follow:

- Background on Community Involvement and Concerns
- Summary of Comments Received During the Public Comment Period and the MDEQ's Responses

BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS

Prior to the 12th St.-OU4 being included in the Site as a source area, community involvement was non-existent. Since the 12th St.-OU4 became part of the Superfund site, the MDEQ has issued 12 progress reports/fact sheets and hosted 22 public meetings. These meetings and reports covered the time period from the placement of the Site on the NPL, to the Proposed Plan meeting for the 12th St.-OU4. During the

public meetings the MDEQ provided background information on the 12th St.-OU4, explained the Superfund process, and provided details of the upcoming investigations and their findings. During July 1993, the MDEQ issued a fact sheet describing the RI work being conducted at the 12th St.-OU4. All phases of the RI/FS were completed by July 1997. The MDEQ issued other fact sheets and progress reports summarizing the results of the test pit investigation and RI. Results of the test pit investigation were presented to the GAC/CAC on August 18, 1993. The majority of the RI results were presented to the GAC/CAC on July 20, 1994. Some additional RI findings were reported at a GAC/CAC meeting held June 12, 1996. The test pitting, RI, and FS reports were released to the public and placed in the six information repositories, listed in Table 2, in February 1994, October 1996, and July 1997, respectively. The Proposed Plan was also released for public review in July 1997. The Administrative Record has been made available to the public at the Superfund Section of the MDEQ in Lansing, Michigan. General site information may also be reviewed at the six information repositories established at the locations shown in Table 2.

TABLE 2

Allegan Public Library 331 Hubbard Street Allegan, Michigan 616-673-4625	Charles Ransom Library 180 South Sherwood Plainwell, Michigan 616-685-8024	Saugatuck-Douglas District Library Center Street Douglas, Michigan 616-857-8241
Kalamazoo Public Library 316 South Rose Kalamazoo, Michigan 616-342-9837	Otsego District Library 219 South Farmer Otsego, Michigan 616-694-9690	Waldo Library Western Michigan University Kalamazoo, Michigan 616-387-5156

A public meeting was held on August 13, 1997, to discuss the Proposed Plan. The meeting was attended by approximately 25 persons, including local residents and representatives of the PRPs. At the meeting, representatives from the MDEQ and the PRPs answered questions about the 12th St.-OU4 and the remedial alternative under consideration. Formal oral comments on the Proposed Plan were documented by a court reporter. A verbatim transcript of questions and answers, and public comments during the public meeting has been placed in the information repositories and Administrative Record. Written comments were accepted at the meeting and by mail and were also placed in the information repositories.

The Proposed Plan was available for public comment from July 30, 1997, through August 30, 1997. Based upon a request for an extension, the MDEQ extended the comment period an additional 15-days. Comments received during this public comment period were reviewed, and the MDEQ responses are included in this Responsiveness Summary. Advertisements announcing the availability of the Proposed Plan and start of the public comment period were published in the *Kalamazoo Gazette*, the *Union Enterprise*, *Allegan County News & Gazette*, *Holland Sentinel*, and the *Kalamazoo Gazette-North*.

Summary of Comments Received

Comment 1

One commenter stated that the proposed remedy is not in the public interest because it does not consider possible damage to health.

Response 1

A risk assessment was conducted on the KHL-OU3 and used for the 12th St.-OU4 due to similarities between the two landfills. Both landfills consist of similar materials, have the same chemical of concern, and have similar human and ecological receptors and pathways. They also show similar PCB trends: PCB concentration increases with depth in the landfill, no PCBs were detected in the groundwater, and PCBs have migrated into the Kalamazoo River from both of these areas. Human health risk was assessed for exposure to PCBs through inhalation of dust particles by on-site workers, dermal contact with residuals, and ingestion of contaminated soils/residuals. Although the noncarcinogenic risks were determined not to be of concern, the risk associated with the exposure to the carcinogen PCB for on-site workers, trespassers, and anglers was determined to provide an unacceptable risk.

As stated in the CERCLA, all remedies must meet the threshold criterion of being protective of human health and the environment. It has been determined that the remedy selected for the 12th St.-OU4 meets this criterion. Consolidating residuals that have migrated from the landfill into the surrounding woodland, wetlands, adjacent property, and the former powerhouse discharge channel of the Kalamazoo River in the vicinity of the landfill will reduce the areal extent of PCB-containing materials. Capping the residuals consistent with Part 115, Solid Waste Management, of the NREPA will significantly reduce or eliminate the potential exposure and risks associated with inhalation, dermal contact, and ingestion of residuals. Berm construction with slope stabilization, in combination with the landfill cap, will further reduce or eliminate erosion of PCBs into the area surrounding the landfill, thereby reducing potential exposure to PCBs. Institutional controls will also be implemented

to restrict access and future use of the Site in order to protect public health, safety and welfare, and the environment.

Comment 2

One commenter was concerned that ease and cost were the only thoughts involved in the selection of a remedy.

Response 2

In accordance with the CERCLA and the NCP, the remedial alternatives were evaluated against nine criteria. The criteria are grouped into three categories: threshold, primary balancing, and modifying. The first of these, threshold criteria, consists of protection of human health and the environment and compliance of ARARs. A remedy can only be considered for implementation if it meets these criteria. The primary balancing criteria category contains long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. These criteria are used to compare the remedial alternatives against one another. The modifying criteria, consisting of support agency and community acceptance, are used to assess U.S. EPA and community support of the remedy. The preferred alternative can be modified based on the U.S. EPA's and community's comments on the Proposed Plan.

Ease (or implementability) and cost were categorized as primary balancing criteria and were therefore used to compare one alternative to another. These two criteria were considered as part of the nine criteria as the NCP requires but were not given any more weight than other primary balancing criteria. However, prior to comparing the remedy to the primary balancing criteria it was determined that the remedy met the threshold criteria of being protective of human health and the environment and complied with ARARs.

Comment 3

One commenter stated that soils behind the dams and "hot spots" in the river should be addressed before the landfill is capped.

Response 3

The first step in the strategy for the remediation of this site is to shut-off the external sources of PCB to the Kalamazoo River and Portage Creek. Beginning at the upstream locations, major external sources of PCB include the landfill, the King Highway Landfill, the Willow Boulevard/A-Site, and the Allied Paper property. Once the external sources are controlled, we can begin with the river. During this RA,

however, a portion of the area of the Kalamazoo River known as the former powerhouse discharge channel shall be remediated.

Comment 4

Three commenters and the Kalamazoo River Protection Association (KRPA) stated that containment walls or berms are needed at the landfill due to its proximity to the river. The KRPA suggested using 300 feet of impenetrable materials, including a bulkhead or seawall for support and erosion control.

Response 4

The new containment system will increase side slope stability and eliminate/reduce erosion. Items such as the composition of materials, height of the new containment system to be installed, and the side slopes to be stabilized shall be determined during RD. In addition, a buffer zone of adequate distance shall be created to ensure that, for the lifetime of the remedy, no hydraulic connection will exist between the wastes in the landfill and the Kalamazoo River/former powerhouse discharge channel.

Comment 5

Four commenters expressed a concern over the recreational use and aesthetics of the landfill after the remedy is implemented. Several persons suggested that the landfill be used as a scenic stop along the future river trail walkway, a boat ramp, or a park. Two commenters stated that the local habitat should be restored to high quality after the landfill is capped. Another suggested that any rip-rap next to the Kalamazoo River be dressed to be aesthetically pleasing.

Response 5

After disposal of PCB-contaminated materials back into the landfill and capping, the landfill shall be seeded and maintained to provide an aesthetically acceptable appearance. The type of vegetation shall be selected during the RD process. The RD process shall also determine what kind of erosional control structures would be necessary at the 12th St.-OU4.

Although the post-closure plan for the landfill will necessarily include institutional controls such as access restrictions as required by Part 201, Environmental Remediation, of the NREPA, the remedy is not expected to prohibit the restoration back to high quality habitat.

Comment 6

Many commenters stated their support of the remedy because it prevents contaminants from migrating to the Kalamazoo River and Lake Michigan.

Response 6

The MDEQ acknowledges these comments.

Comment 7

Six commenters, the KRPA, and the Michigan United Conservation Club (MUCC) stated that the landfill should be moved out of the 100-year floodplain of the Kalamazoo River.

Response 7

Off-site disposal of the landfill contents (i.e., PCB-contaminated residuals) was evaluated as a possible remedial alternative in the Alternative Arrays Document and the Focused Feasibility Study (FFS) for the KHL-OU3. For the reasons stated in the KHL-OU3 ROD, this alternative was not selected. The MDEQ determined there, as it has here, that the cap and containment alternative satisfies all of the requirements of the CERCLA and Part 201, Environmental Remediation, of the NREPA. Moreover, it has been determined that the landfill is out of the 100-year flood elevation. The RD process shall address the erosion protection necessary to protect the containment system from the erosional effects of a 500-year flood.

Comment 8

One commenter and the KRPA insisted that all sediments and residuals outside the landfill be removed down to 0.33 ppm Method of Detection Level to be protective of wildlife, especially sensitive receptors such as mink.

Response 8

This RA shall excavate the PCB-contaminated material that eroded from the landfill into the adjacent areas and relocate that material back into the landfill. Post-excavation sampling will be conducted and a final determination whether or not additional response actions are necessary will be made as part of the ROD for the Phase I portion of the Kalamazoo River.

Comment 9

One commenter stated that the flexible membrane liner (FML) should be able to withstand burrowing animals such as woodchucks and muskrats. Another asked if data exists to show how brittle the FML becomes when exposed to long cold periods.

Response 9

Construction of the landfill capping is consistent with the requirements of Part 115, Solid Waste Management, of the NREPA. The cap shall consist of a six-inch topsoil layer underlain by a barrier layer at least two feet in depth, a 30-mil thick FML and a

six-inch granular fill layer. The MDEQ Waste Management Division has determined that a barrier layer at least two feet thick will protect against freeze/thaw damage to the FML, even when subject to long cold periods. To control damage from burrowing animals, a monitoring repair and animal control program shall be implemented.

Comment 10

Two commenters were concerned that capping provides a temporary solution to the PCB contamination rather than a permanent one. One person stated that the remedy should eliminate rather than reduce the potential migration of PCBs into the Kalamazoo River.

Response 10

If maintained properly, the landfill cap should provide long-term protection of human health and the environment. Residuals containing PCBs will be confined beneath the cap and therefore will not come into contact with humans or wildlife. With proper construction and maintenance of the cap, the remedy will adequately control the release of PCBs to the environment.

Comment 11

The KRPA and one other commenter insisted that the PRPs be financially accountable for cleaning and restoring the Site.

Response 11

The PRPs for the Site, Millennium Holdings, Inc./Allied Paper, Inc., Georgia-Pacific Corporation, Simpson-Plainwell Paper Company, and James River Corporation signed an AOC (DFO-ERD-91-001) with the state of Michigan in 1991. Under the AOC, the PRPs have agreed to fund and conduct the RI and FS and reimburse the state for oversight. When the ROD for the 12th St.-OU4 is signed, the PRPs will be given the opportunity to implement the chosen remedy. If they decline, the U.S. EPA and MDEQ will conduct the cleanup with money from the Superfund and state appropriations and pursue reimbursement from the PRPs.

Comment 12

Three commenters and the KRPA expressed a concern that the cap may not stop erosion from river meander. They added that, since the residuals are present below the mean water level of the river, everyday erosion may have a significant effect on the landfill. The KRPA added that, if the dam is removed or fails, the river may cut into the landfill.

Response 12

Detailed specifications of the landfill cap and associated erosion control measures will be determined in the RD phase of the Superfund process. New containment system construction, placement of erosion protection, and a buffer zone between the landfill and the Kalamazoo River should adequately protect against the everyday erosive forces of the river. Protection against a 500-year flood event will be incorporated into the final cap design. This includes construction of a new containment system and erosion protection that extends to a minimum elevation of 707 feet MSL, which is approximately two feet above the 100-year flood elevation. If dam removal is undertaken, it will be done in a manner that is consistent with the remedy. If the river starts to meander, the PRPs would be required to take actions that assure the integrity of the cap and containment system.

Comment 13

Two persons and the KRPA commented that visual criteria should not be used when dredging the river or consolidating waste from outside the landfill boundaries.

Response 13

A visual criterion is being used to direct the excavation of the residual material that has eroded from the landfill. Verification sampling will be performed after removal is complete. A decision on whether additional response actions are necessary will be included as part of the ROD for the Phase I portion of the Kalamazoo River.

Comment 14

The KRPA commented that more sampling is necessary in the area to determine the amount of residuals present.

Response 14

The amount of residuals present was estimated by reviewing historical information, conducting 16 test pits and several soil borings, installing 15 monitor wells and three leachate wells, and conducting field reconnaissance along the periphery of the landfill in the adjacent properties. Samples were collected from within the landfill as well as from locations outside the landfill. Laboratory analyses of soil, sediment, and residuals, and visual classification of deposits have been recorded. The MDEQ has determined that the RI sampling and field reconnaissance was adequate to estimate the extent of PCB contamination. Additional investigation will, however, be conducted during the design of the excavation and disposal activities to better define the extent of material impacted with PCBs.

Comment 15

The KRPA and one commenter proposed the use of a nearby gravel pit as a landfill in which the PCB-contaminated residuals from the 12th St.-OU4 could be placed.

Response 15

The MDEQ evaluated the option of transporting the PCB-contaminated residuals to an off-site location in the removal alternative evaluated in the FFS for the KHL-OU3, which is directly applicable to the 12th St.-OU4. The preferred alternative was the cap and containment alternative.

Comment 16

The KRPA stated that presumptive remedies should not be used at the 12th St.-OU4 due to the differences between it and the KHL-OU3. The differences mentioned were that the King Highway Landfill has a berm and the landfill has no berms and is by a wetland and a dam.

Response 16

The presumptive remedy approach was proposed for the landfill due to its similarity to the King Highway Landfill:

- Each landfill is comprised of large amounts of paper-making residuals which contain PCBs. Residuals in each landfill were generated from the same paper manufacturing process.
- Each landfill accepted paper-making residuals produced during the same time period.
- Each landfill is adjacent to the Kalamazoo River and floodplain.

The differences between the landfill and the King Highway Landfill were examined and determined not significant enough to change the selection of the remedy itself. Containment and capping will provide adequate protection of human health and the environment at both the King Highway Landfill and the landfill.

Comment 17

The KRPA commented that there has not been an adequate risk assessment for the 12th St.-OU4.

Response 17

The risk assessment conducted for the KHL-OU3 was determined to be generally applicable to the 12th St.-OU4. In addition, a Site-wide BERA (June 1999 and August 2000 addendum) has been completed.

Comment 18

The KRPA stated that, as the paper waste (excluding PCBs) breaks down, chemical changes will create a need for groundwater monitoring. Another commenter asked whether the remedy adequately protects groundwater in the future.

Response 18

The implementation of a long-term groundwater monitoring plan compliant with Part 201, Environmental Remediation, of the NREPA and the TSCA (40 CFR Section 761.61(c)) will ensure effectiveness of the remedy. The details of the monitoring plan will be determined in the RD stage of the Superfund process.

Comment 19

The KRPA and the MUCC stated that the hydraulic vacuum dredge is a more environmentally sound method for dredging than the backhoe.

Response 19

The MDEQ determined that removal of the residual material in the former powerhouse discharge channel that is contiguous with the landfill will be most effective by enclosing the area with sheet piling, dewatering, then excavating the material and relocating it back into the landfill. Proper siltation controls will be implemented during the procedure.

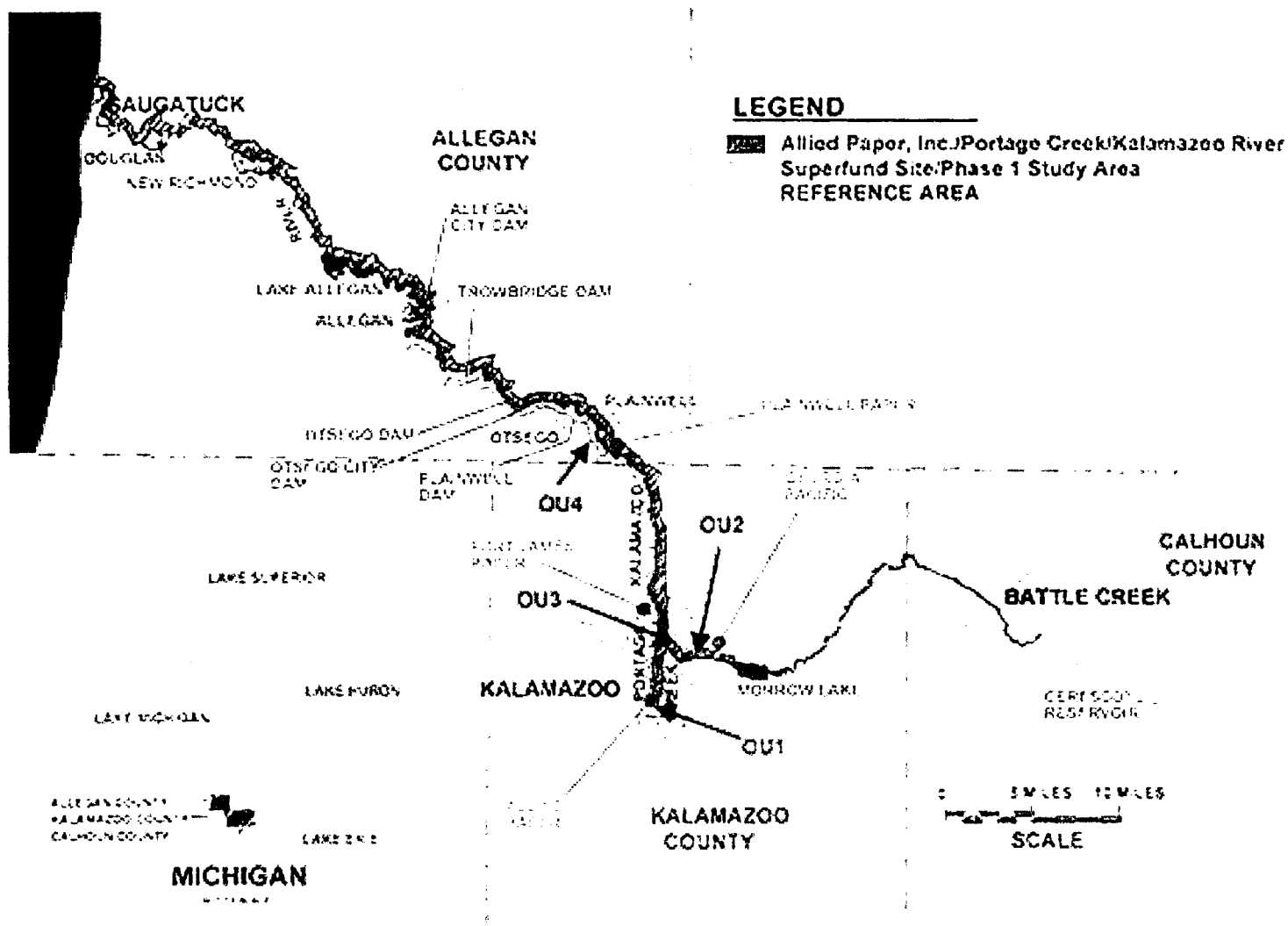
Comment 20

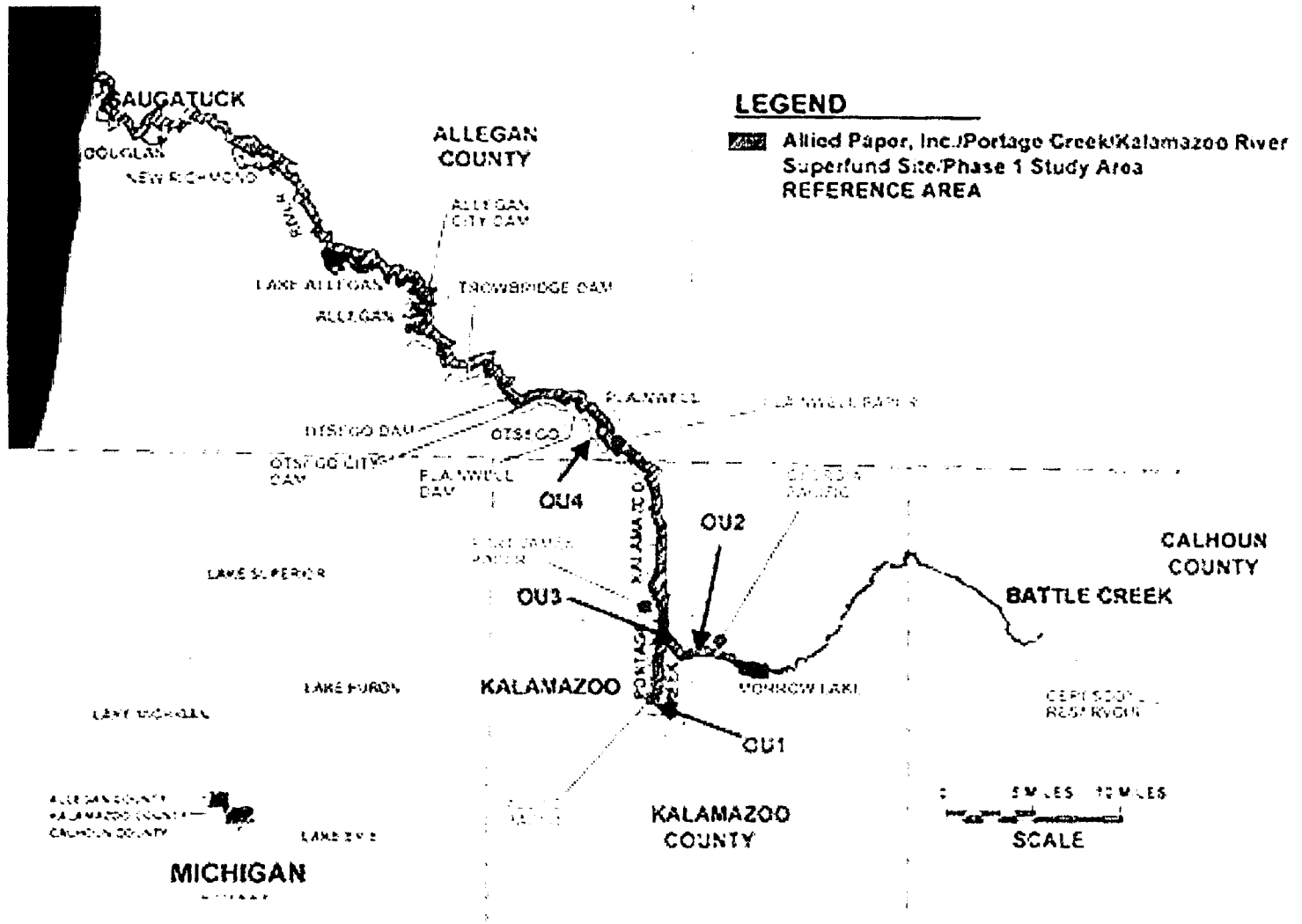
The KRPA expressed a concern that the remedy selected for the 12th St.-OU4 will set precedence at the other landfills within the Site.

Response 20

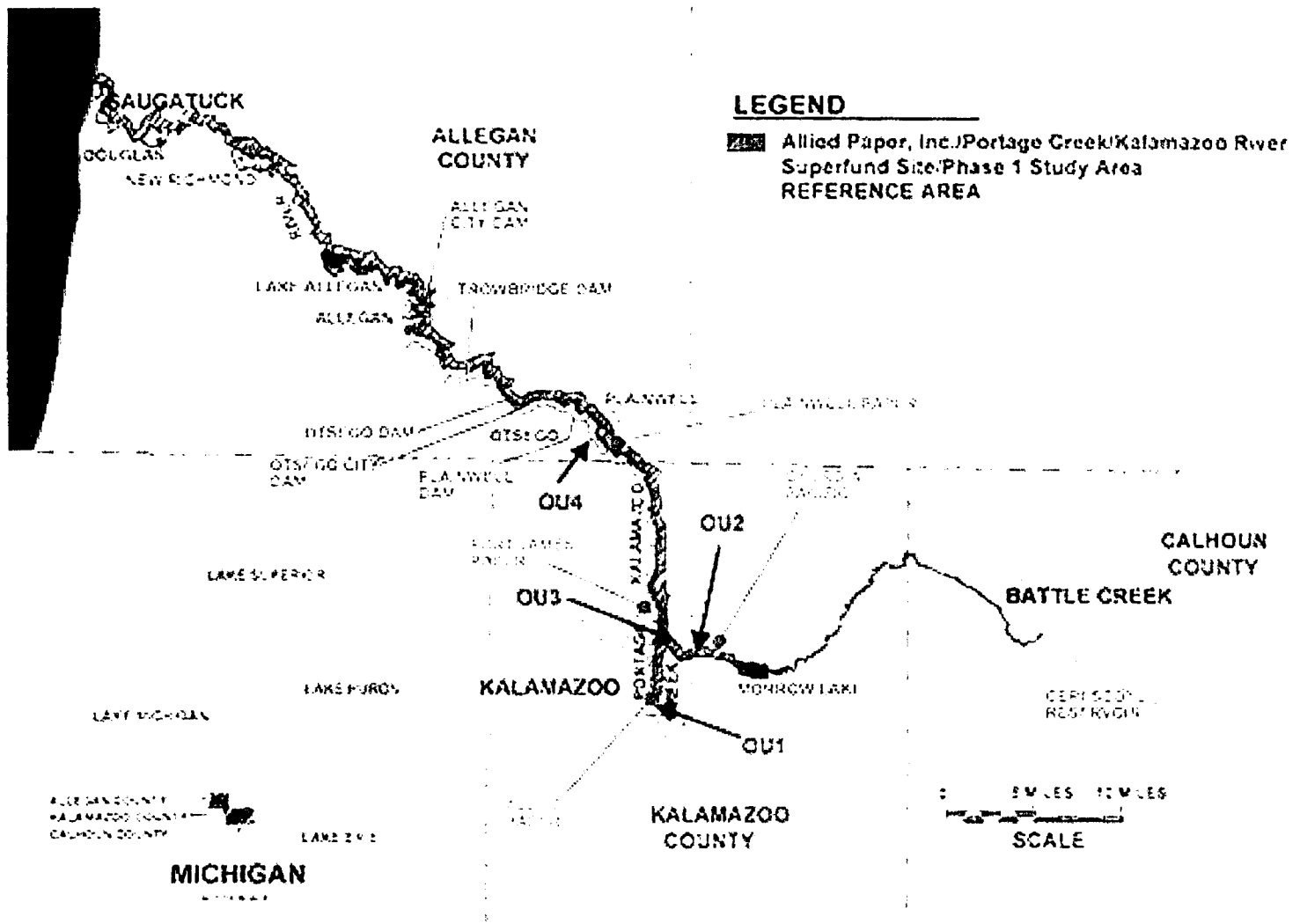
Except as noted in this ROD with regard to the relevance of the KHL-OU3 to the remedy selection for this 12th St.-OU4, the individual OUs at the Site have been (or will be) investigated and evaluated separately. This approach is consistent with the AOC between the MDEQ and the PRPs, and also is consistent with the CERCLA, the NCP, and Part 201, Environmental Remediation, of the NREPA.

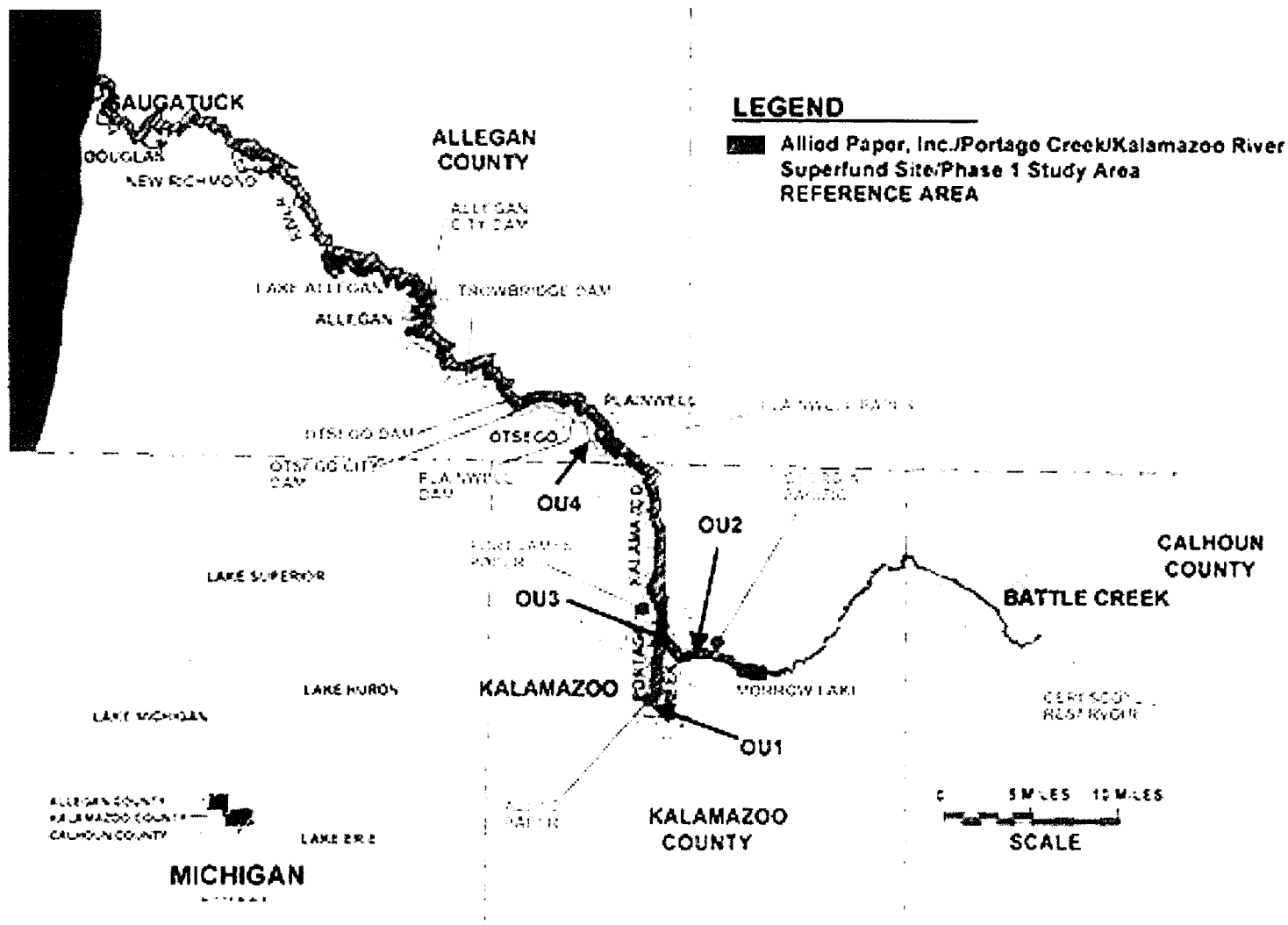
The various reaches of the river, and within each individual river OU need to be treated on a case by case basis. It is not likely that one remedial alternative, or technology, will be adequate to address the variety of conditions in and along the Kalamazoo River and Portage Creek.





APPENDIX D





APPENDIX E

**STATEMENT OF WORK FOR
THE REMEDIAL DESIGN AND REMEDIAL ACTION
AT
12th STREET LANDFILL, KALAMAZOO RIVER SUPERFUND SITE
OPERABLE UNIT #04
PLAINWELL, MICHIGAN**

I. PURPOSE

The purpose of this Statement of Work (SOW) is to set forth requirements for implementation of the remedial action set forth in the Record of Decision (ROD) for Operable Unit #04, which was signed by the Director of the Michigan Department of Environmental Quality and concurred with by the U.S. EPA Region V on September 28, 2001, for the 12th Street Landfill, OU#4 of the Allied Paper/Portage Creek/Kalamazoo River Superfund Site (Site). Weyerhaeuser shall follow the ROD, the Consent Decree, this SOW, the approved Remedial Design Work Plan, the approved Remedial Action Work Plan, U.S. EPA Superfund Remedial Design and Remedial Action Guidance and any additional guidance provided by U.S. EPA in submitting deliverables for designing and implementing the remedial action for OU-4.

II. DESCRIPTION OF THE REMEDIAL ACTION/PERFORMANCE STANDARDS

Weyerhaeuser shall design and implement the Remedial Action to meet the performance standards and specifications set forth in the ROD and this SOW. Performance standards shall include cleanup standards, standards of control, quality criteria and other substantive requirements, criteria or limitations including all Applicable or Relevant and Appropriate Requirements (ARARs) set forth in the ROD, SOW and/or Consent Decree.

The areas that comprise the Operable Unit #04 that will be addressed by this SOW are listed below:

- The landfill itself, which primarily contains PCB-contaminated paper residuals (residuals), and from which PCB contamination has migrated into the surrounding areas.
- Groundwater contamination and PCB-contaminated landfill leachate.
- The woodland located immediately south/southeast of the landfill.
- Wetlands, as identified by National Wetland Inventory maps, that border the landfill to the north and northwest.
- A portion of the adjacent gravel operation property (adjacent property) that borders the landfill to the west.
- A portion of the former powerhouse discharge channel of the Plainwell Dam on the Kalamazoo River, which contains residuals that have eroded from the east side of the landfill.

1. Excavation

Weyerhaeuser shall determine the horizontal and vertical extent of the PCB contamination based on field reconnaissance and/or sample analyses prior to any excavation or dredging in the woodland, wetlands,

APPENDIX E

adjacent property, or the former powerhouse discharge channel. Pursuant to U.S. EPA approval, Weyerhaeuser may rely on existing site data in determining the extent of contamination. The excavation along the east side of the landfill (along the former powerhouse discharge channel and the river) shall be extensive enough to create an adequate buffer zone to ensure that, for the lifetime of the remedy, there is no direct contact between the PCB-contaminated wastes within the newly constructed landfill containment system and the Kalamazoo River/former powerhouse discharge channel. This buffer zone shall be of sufficient size to allow for the installation of and access to groundwater monitoring wells. The extent of the excavation shall be identified primarily by visual criteria and the excavated material shall be relocated further into the landfill.

Weyerhaeuser shall submit a Remedial Action (RA) Work Plan to U.S. EPA for review and approval prior to initiating any excavation activity. The RA Work Plan shall be based on the approved Final Design and shall include air and surface water monitoring provisions as determined necessary by U.S. EPA. Subsequent to work plan approval, all excavated material will be dewatered as necessary and disposed of in the landfill prior to construction of the cover and containment system.

Upon completion, Weyerhaeuser shall re-establish vegetation and surface elevations unless otherwise approved by U.S. EPA. Soil erosion shall be controlled compliant with state law during remedy implementation. Restoration of the wetlands pursuant to Part 303, Wetlands Protection, of the NREPA, shall also be carried out.

2. Cap

Weyerhaeuser shall install a cap on the landfill portion of the 12th St.-OU4 in compliance with the relevant requirements of Part 115, Solid Waste Management, of the NREPA concerning cap specifications for closure of a solid waste disposal facility. The construction of the cap over the landfill will minimize infiltration of precipitation through the landfill and migration of PCBs from the landfill into the groundwater, woodland, wetlands, adjacent property, and the former powerhouse discharge channel, and eliminate direct contact hazards. The cap consists of the following components from bottom to top.

- A layer of select granular fill at least six inches thick, from an off-site source, having a minimum hydraulic conductivity of 1×10^{-3} centimeters per second, shall be placed on top of the landfill as a suitable sub-grade for the cap. The need for a gas venting system will be evaluated during the RD process. If it is determined that a gas venting system is needed, based upon the data from the RD process or other site information, this layer will be modified as approved by U.S. EPA to also act as a gas venting layer. If so modified, this gas venting layer shall be designed to collect landfill gas (methane) and route it to a passive venting system. If it is determined that a gas venting system is required, it shall be monitored pursuant to an approved monitoring plan to determine whether emissions may cause potential health effects. If potential health effects are indicated, Weyerhaeuser shall take appropriate action, as approved by U.S. EPA, to address these issues. Appropriate action may include installation, operation, and maintenance of an air emission treatment system.
- A polyvinyl chloride (PVC) geomembrane liner at least 30 mils thick, or its equivalent, will be placed over the select granular fill.
- A general fill (protective) layer at least 24 inches thick will be placed above the 30-mil PVC, geomembrane liner. The protective layer will be capable of sustaining the growth of non-woody plants, and shall have adequate water holding capacity. The water that accumulates within this layer will drain to a ditch or sedimentation outlet structure and discharge to the Kalamazoo River.
- A vegetative (erosion) layer at least six-inches thick will be placed over the protective layer. The

APPENDIX E

vegetative layer will be designed to promote vegetative growth, provide surface water runoff, and minimize erosion. The feasibility of using vegetation that would provide habitat, such as native grasses, will be addressed in the RD.

3. Erosion Protection and Containment System

Weyerhaeuser shall install erosion protection on the newly constructed side walls of the landfill. This protection shall be sufficient to protect the side walls from a 500-year flood event. The erosion protection shall extend, at a minimum, to an elevation of 707.0 feet above mean sea level (MSL), which is approximately two feet above the 100-year flood elevation. Placement of erosion and flood protection on the side walls of the landfill shall be consistent with the relevant requirements of Part 115, Solid Waste Management, Part 301, Inland Lakes and Streams, Part 91, Soil Erosion and Sedimentation Control, and Part 303, Wetlands Protection, of the NREPA.

Weyerhaeuser shall construct a containment system around the outside of the landfill. The containment system shall be designed to prevent release of PCB contaminated soils, residuals, or leachate. The containment system shall provide appropriate slope stability and flood and erosion protection. The containment system shall be designed, at a minimum, to meet the relevant provisions of Michigan Solid Waste Landfill closure regulations pursuant to Part 115, Solid Waste Management, of the NREPA. The containment system must be approved prior to construction.

4. Short-Term and Long-Term Monitoring

Weyerhaeuser shall perform short-term surface water monitoring during all construction and excavation activities that may have an impact on surface water. Surface water monitoring shall be conducted in order to assure that public health, safety, welfare, and the environment are being protected in accordance with state and federal law during implementation of excavation activities.

During construction activities, Weyerhaeuser shall perform air monitoring, as necessary. Air monitoring will ensure that the RA activities do not violate the rules prohibiting the emission of air contaminants in quantities which have injurious effects on human health, animal life, plant life of significant economic value, and/or property as established in Part 55, Air Pollution Control, of the NREPA.

Weyerhaeuser shall perform long-term groundwater monitoring following construction of the remedy. The long-term groundwater monitoring may require the installation of additional monitoring wells or abandonment of existing wells that are no longer necessary. The number and location of ground water monitoring wells shall be specified by Weyerhaeuser in the Remedial Design and is subject to U.S. EPA approval, in consultation with the State. Monitoring of the groundwater aquifer shall be conducted in accordance with Part 201, Environmental Remediation, of the NREPA.

The groundwater from each monitoring well shall be sampled and analyzed by Weyerhaeuser as described below, unless modified in the approved Final O&M Plan:

Semi-annual Monitoring: Laboratory analysis performed shall include PCBs, dioxins, U.S. EPA's Target Analyte List (TAL) inorganics, U.S. EPA'S Target Compound List (TCL) organics, measurement of groundwater and surface water levels, as well as the field parameters turbidity, temperature, pH and conductivity.

Quarterly Monitoring: A smaller list of indicator parameters shall be sampled on a quarterly basis. The indicator parameters to be analyzed shall be specified in the Remedial Design and shall at a minimum include PCBs, measurement of groundwater and surface water levels, as well as the field parameters turbidity,

APPENDIX E

temperature, pH and conductivity.

After at least two years of sampling under the Semi-Annual Monitoring and Quarterly Monitoring programs, Weyerhaeuser may petition to discontinue the Quarterly Monitoring program and sample only on a semi-annual sampling frequency. Weyerhaeuser may at that time also petition to limit the number of parameters included in the Semi-Annual Monitoring program. After at least two years of sampling on only a semi-annual basis, Weyerhaeuser may petition U.S. EPA to switch to only performing the monitoring on an annual basis if there has been no significant change in sampling results, or site conditions between sampling events. After at least five (5) years of sampling on an annual basis only, Weyerhaeuser may petition U.S. EPA to switch to a sampling frequency of once every five (5) years if there has been no significant change in sampling results between sampling events. The samples collected on a five year basis shall be analyzed for the parameters specified in the original Semi-Annual Monitoring program. Each petition under this task is subject to U.S. EPA review and written approval. U.S. EPA reserves the right to require Weyerhaeuser to sample on a more frequent basis, and/or for additional parameters, based upon data indicating a significant change in sampling results between sampling events.

The continued need for groundwater monitoring will be evaluated at the five-year review required under the NCP, and at each review thereafter, but shall continue until the U.S. EPA, in consultation with the support agency, determines that such monitoring is no longer necessary.

5. Leachate Collection

During RD, Weyerhaeuser shall evaluate the need for either an interim or long-term leachate collection system. The evaluation, at a minimum, shall consider the water content of the waste, the presence and quantity of perched water within the landfill, the potential for and effect of waste settlement and the practicability of extracting water from the residuals matrix.

If, based upon the data, U.S. EPA determines that a leachate collection is necessary, Weyerhaeuser shall install and operate a leachate collection system to ensure that the public health, safety and welfare, and the environment are adequately protected.

6. Fencing and Permanent Marker(s)

Weyerhaeuser shall install fencing around the entire landfill portion of the 12th St.-OU4. Weyerhaeuser shall place permanent marker(s) around the boundary of the landfill describing the restricted area of the 12th St.-OU4 and the nature of any restrictions. Warning signs will also be posted on the fence every 200 feet and on all entry gates. The number, content, and location of the permanent markers and warning signs shall be approved by the U.S. EPA.

7. Deed Restrictions

Weyerhaeuser shall rely upon the existing Restrictive Covenant (MDEQ Reference No.: RC-RRD-03-052 on USEPA Site No.: 059B) permanently filed for the property on April 23, 2004, to regulate future use of the landfill to protect public health, safety and welfare, and the environment; provided that if any deed restrictions are necessary on adjacent properties, Weyerhaeuser shall attempt to obtain such deed restrictions in accordance with Section XI of the Consent Decree.

8. Long-term Maintenance

APPENDIX E

Weyerhaeuser shall perform the long-term maintenance and post-closure care as required by Part 201, Environmental Remediation, of the NREPA, which shall be provided as part of this RA. A detailed O&M Plan shall be submitted as part of this RD. Once approved, long-term O&M shall be carried out pursuant to the plan.

9. Other Provisions

Measures will be taken during remedy construction activities to minimize the noise and dust impacts of construction upon the surrounding community. Fugitive dust emissions will be monitored and controlled in a manner to ensure that they comply with the standards contained in Part 55, Air Pollution Control, of the NREPA.

III. SCOPE OF REMEDIAL DESIGN AND REMEDIAL ACTION

The Remedial Design/Remedial Action shall consist of six tasks. All plans are subject to EPA approval.

Task 1: Remedial Design Work Plan

Weyerhaeuser shall submit a Work Plan which shall document the overall management strategy for performing the design, construction, operation, maintenance and monitoring of Remedial Actions for U.S. EPA review and approval. The plan shall document the responsibility and authority of all organizations and key personnel involved with the implementation and shall include a description of qualifications of key personnel directing the Remedial Design, including contractor personnel. The Work Plan shall also contain a schedule of Remedial Design activities. Weyerhaeuser shall submit a Remedial Design Work Plan in accordance with Section IX and paragraph 28 of the Consent Decree.

The RD Work Plan shall include a project schedule for each major activity and submission of deliverables generated during the Remedial Design. This RD Work Plan shall include, at a minimum, a pre-design QAPP, Health and Safety Plan, and a Field Sampling Plan.

Weyerhaeuser shall implement the pre-design work in accordance with the final RD Work Plan. The results of the pre-design studies shall be included with the Preliminary Design.

Task 2: Remedial Design Phases

Weyerhaeuser shall prepare construction plans and specifications to implement the Remedial Actions at the Operable Unit #4 as described in the ROD and this SOW. Plans and specifications shall be submitted in accordance with the schedule set forth in Section V below. Subject to approval by U.S. EPA, Weyerhaeuser may submit more than one set of design submittals reflecting different components of the Remedial Action. All plans and specifications shall be developed in accordance with U.S. EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A) and shall demonstrate that the Remedial Action shall meet all objectives of the ROD, the CD and this SOW, including all Performance Standards. EPA's Project Coordinator and Weyerhaeuser's Project Coordinator will meet in person or via conference call, at a minimum, on a bi-monthly basis, unless EPA's Project Coordinator and Weyerhaeuser's Project Coordinator mutually agree to meet on a greater or less frequent basis.

A. Preliminary Design

Weyerhaeuser shall submit the Preliminary Design when the design effort is approximately 30% complete. If required by the approved RD Work Plan, the Preliminary Design submittal shall include or discuss, at a minimum, the following:

APPENDIX E

- design criteria;
- results of treatability studies;
- results of additional field sampling and pre-design work;
- project delivery strategy;
- preliminary plans, drawings and sketches;
- required specifications in outline form;
- preliminary construction schedule;
- proposed cleanup verification methods, including compliance with Applicable or Relevant and Appropriate Requirements (ARARs);
- proposed siting/locations or processes/construction activities;
- real estate, easement, restrictive covenant, and permit requirements; and,
- QAPP/Health and Safety Plan/Field Sampling Plan/Contingency Plan.

B. Intermediate Design

The Intermediate Design, if required by EPA or if independently submitted by Weyerhaeuser, shall be a continuation and expansion of the preliminary design. Any value engineering proposals must be identified and evaluated during this review.

C. Prefinal and Final Designs

Weyerhaeuser shall submit the Prefinal Design when the design effort is 95% complete and shall submit the Final Design when the design effort is 100% complete. The Prefinal Design shall fully address all U.S. EPA comments made to the preceding design submittal. The Final Design shall fully address all of U.S. EPA comments made to the Prefinal Design and shall include reproducible drawings and specifications suitable for bid advertisement.

The Prefinal Design shall serve as the Final Design if U.S. EPA has no further comments and issues the notice to proceed.

Unless otherwise directed by EPA in the approved RD Work Plan, the Prefinal and Final Design submittals shall include, at a minimum, those elements listed for the Preliminary Design, as well as the following:

- final plans and specifications;
- Draft OU4 Operation and Maintenance Plan;
- Construction Quality Assurance Project Plan ("CQAPP"). The CQAPP, which shall detail the approach to quality assurance during construction activities at OU4, shall also specify a quality assurance official ("QA Official") to conduct a quality assurance program during the construction phase of the project;
- Contingency Plan, and;
- Performance Standards Verification Plan. The PSVP shall explain in detail which mechanisms will ensure that the RA achieves the overall Remedial Action Objectives ("RAOs") developed and defined in the ROD, including those RAOs that are not based upon concentration levels of hazardous substances. The PSVP shall include provisions for confirmation sampling as needed.

Task 3: Remedial Action Work Plan

Weyerhaeuser shall submit a Remedial Action Work Plan which includes a detailed description of the remediation and construction activities. The RA Work Plan shall list the major deliverables and include a project schedule for each major activity and submission of deliverables generated during the Remedial Action. Weyerhaeuser shall submit a Remedial Action Work Plan in accordance with Section IX,

APPENDIX E

paragraph 29 of the Consent Decree and Section V of this SOW.

Task 4: Remedial Action Construction

Weyerhaeuser shall implement the Remedial Action as detailed in the approved Final Design. The following activities shall be completed in constructing the Remedial Action.

A. Pre-construction inspection and meeting:

Unless not required by U.S. EPA, Weyerhaeuser shall participate with the U.S. EPA and the State in a preconstruction inspection and meeting to:

- a. Review methods for documenting and reporting inspection data;
- b. Review methods for distributing and storing documents and reports;
- c. Review work area security and safety protocol;
- d. Discuss any appropriate modifications of the construction quality assurance plan to ensure that site-specific considerations are addressed; and,
- e. Conduct an OU-4 walk-around to verify that the design criteria, plans, and specifications are understood and to review material and equipment storage locations.

The pre-construction inspection and meeting shall be documented by a designated person and minutes shall be transmitted to all parties.

B. Final Construction Completion Inspection:

As approved by U.S. EPA in the RA construction schedule included in the RA Work Plan, after Weyerhaeuser makes a preliminary determination that OU4 construction is complete (i.e., all remedial action construction activity is complete and long-term O&M and post closure care is ready to commence), Weyerhaeuser shall notify the U.S. EPA and the State for the purposes of conducting a prefinal construction completion inspection. The prefinal construction completion inspection shall consist of a walk-through inspection of the entire Operable Unit #04 with U.S. EPA. The inspection is to determine whether the construction is complete and consistent with the contract documents. Any outstanding construction items discovered during the inspection shall be identified and noted in a Prefinal Inspection Report, which shall be delivered to U.S. EPA within 15 days of the prefinal RA construction inspection. This report shall summarize the prefinal construction completion activities, outline the outstanding items, actions required to resolve the items, completion date for the items, and an anticipated date for the final inspection.

Within 30 days of U.S. EPA's approval of the Prefinal Inspection Report, Weyerhaeuser shall initiate any construction activity or other work identified in that document as required to be completed. Within 90 days after completion of any work identified in the Prefinal Inspection Report, Weyerhaeuser shall notify the U.S. EPA and the State for the purposes of conducting a final construction completion inspection. The final inspection shall consist of a walk-through inspection of Operable Unit #04 by U.S. EPA and Weyerhaeuser. The Prefinal Inspection Report shall be used as a checklist with the final inspection focusing on the outstanding construction items identified in the Prefinal Inspection Report. Confirmation shall be made that outstanding items have been resolved. If any items are unresolved, the inspection shall be considered to be a Prefinal Construction Inspection requiring another Prefinal Construction Completion Inspection Report and subsequent Final Construction Completion Inspection. Subsequent to

APPENDIX E

a successful final construction completion inspection and within the time period set forth in the approved RA Work Plan, Weyerhaeuser shall submit a Certification of Completion of Construction Report, which shall contain a certification by a professional engineer that the construction has been completed consistent with the contract documents and the Remedial Action. Thereafter, and in accordance with the schedule in the approved RA Work Plan, U.S. EPA will issue a Certification of Completion of Construction for purposes of disbursement under Paragraph 3.c. of Appendix G of the Consent Decree

C. Pre-certification of OU-4 Remedial Action Inspection:

In accordance with Paragraph 65 of the Consent Decree, within 90 days after Weyerhaeuser concludes that all phases of the Remedial Action (excluding OU4 O&M), have been fully performed and the OU4 Performance Standards (as defined in the approved RA and Performance Standard Verification Plan) have been attained, Weyerhaeuser shall schedule and conduct a pre-certification inspection of the OU4 Remedial Action to be attended by Weyerhaeuser, EPA and MDEQ. If, after the pre-certification inspection, Weyerhaeuser still believes that the OU4 Remedial Action has been fully performed and the applicable OU4 Performance Standards have been attained, Weyerhaeuser shall submit a Certification of Completion of the OU4 RA Report, requesting certification to EPA for approval, with a copy to MDEQ, pursuant to Section XIII of the Consent Decree within 30 days of the inspection. In the report a professional engineer and Weyerhaeuser's Project Coordinator shall state the construction of the OU4 Remedial Action has been completed in full satisfaction of the requirements of the Consent Decree. The written report shall include a certification statement and signatures identified in Paragraph 65a of the CD and described in Section E paragraph 3 of this SOW below. Subsequent requests for certifications, inspections, and reports shall also be in accordance with the terms of Paragraph 65 of the Consent Decree.

D. Completion of OU-4 Work

In accordance with Paragraph 66 of the Consent Decree, within 90 days after Weyerhaeuser concludes that all phases of the OU4 Work (including OU4 O&M), have been fully performed, Weyerhaeuser shall schedule and conduct pre-certification inspection of OU4 Work pursuant to Section XVI, Paragraph 66a of the Consent Decree, to be attended by Weyerhaeuser, EPA, and MDEQ. If, after the pre-certification inspection, Weyerhaeuser still believes that the OU4 Work has been fully performed, Weyerhaeuser shall submit a written report (Completion of Work Report) by a registered professional engineer stating that the OU4 Work has been completed in full satisfaction of the requirements of the Consent Decree. The written report shall contain the certification statement and signatures identified in Paragraph 66a of the CD and described in Section E, Paragraph 4 of this SOW. If, after review of the written report, EPA, after reasonable opportunity to review and comment by MDEQ, determines any portion of the OU4 Work has not been completed in accordance with the Consent Decree, EPA will notify Weyerhaeuser in writing of the activities that must be undertaken by Weyerhaeuser pursuant to the Consent Decree to complete the OU4 Work, provided, however, that EPA may only require Weyerhaeuser to perform such activities pursuant to Paragraph 66a of the Consent Decree to the extent that such activities are consistent with the scope of the remedy selected in the OU4 ROD. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the OU4 SOW or require Weyerhaeuser to submit a schedule to EPA for approval pursuant to Section XIII of the Consent Decree. Weyerhaeuser shall perform all activities described in the notice in accordance with the specifications and schedules therein, subject to its right to invoke the dispute resolution procedures set forth in Section XXII of the Consent Decree.

If EPA concludes, based on the initial or any subsequent request for Certification of Completion of OU4 Work by Weyerhaeuser and after a reasonable opportunity for review and comment by MDEQ, that the OU4 Work has been performed in accordance with the Consent Decree, EPA will so notify Weyerhaeuser

APPENDIX E

in writing.

E. Reports

1. Progress Reports

As described in the Consent Decree, unless otherwise required on a less frequent basis by EPA, Weyerhaeuser shall submit to U.S. EPA monthly progress reports during construction and quarterly reports during other activities delineating the status of the Operable Unit #04. The progress reports shall include;

- I. Activities conducted during the period and results of data collection activities,
- II. Problems encountered during the period,
- III. Schedule variances and corrective actions, if necessary
- IV. Projected Activities for the next six to twelve week period.

2. Certification of Completion of Construction Report

Within the time frame provided in the approved RA Workplan, Weyerhaeuser shall submit a Certification of Completion of Construction Report. In the report, a registered professional engineer and Weyerhaeuser's Project Coordinator shall state that the Remedial Action has been constructed in accordance with the design and specifications. The report shall include the following items, as necessary:

- Brief description of how outstanding items noted in the Pre-final Construction Completion Inspection were resolved;
- Explanation of modifications made during the RA to the approved RD and RA Work Plans and why these changes were made;
- As-built drawings;
- Synopsis of the construction work defined in the SOW and certification that the construction work has been completed.

Within the time period provided in the approved RA Workplan and subsequent to EPA's approval of the Certification of Completion of Construction Report, EPA will issue to Weyerhaeuser a Certification of Completion of Construction for purposes of disbursement under Paragraph 3.c of Appendix G of the Consent Decree.

3. Certification of Completion of the OU4 RA Report

The Certification of Completion of the OU4 RA Report, provided for in Paragraph 65 of the CD, shall include the following items, as necessary:

- Synopsis of the work defined in the SOW and a demonstration in accordance with the Performance Standards Verification Plan and Performance Standards have been achieved;
- Certification that the Remedial Action has been completed in full satisfaction of the requirements of the Consent Decree, and;
- A description of how Weyerhaeuser will implement any remaining part of the EPA approved Operation and Maintenance Plan.

The written report shall identify any performance standards that have not been met as of the date

APPENDIX E

of the report, and shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of Weyerhaeuser or Weyerhaeuser's Project Coordinator:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

4. Completion of Work Report

In the Certification of Completion of OU4 Work Report, provided for in Paragraph 66 of the Consent Decree a registered professional engineer and Weyerhaeuser's Project Coordinator shall state the OU4 Work has been completed in full satisfaction of the requirements of the Consent Decree. The written report shall contain the following statement, signed by a responsible corporate official of Weyerhaeuser or Weyerhaeuser's Project Coordinator:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Task 5: Operation and Maintenance

Weyerhaeuser shall prepare an Operation and Maintenance (O&M) Plan to cover both implementation and long term maintenance of the Remedial Action. An initial Draft O&M Plan shall be submitted as a final Design Document submission. The Final O&M Plan shall be submitted to U.S. EPA in accordance with the construction schedule contained in the approved RA Workplan. The plan shall comprise the following elements as may be applicable to OU#4:

1. Description of normal maintenance:
 - a. Description of tasks for operation;
 - b. Description of tasks for maintenance;
 - c. Description of prescribed treatment or operation conditions; and
 - d. Schedule showing frequency of each O&M task.
2. Description of potential operating problems:
 - a. Description and analysis of potential operation problems;
 - b. Sources of information regarding problems; and
 - c. Common and/or anticipated remedies.
3. Description of routine monitoring and laboratory testing:
 - a. Description of monitoring tasks;
 - b. Description of required data collection, laboratory tests and their interpretation;
 - c. Required quality assurance, and quality control ;
 - d. Schedule of monitoring frequency and procedures for a petition to U.S. EPA to reduce the frequency of maintenance or to discontinue it; and
 - e. Description of verification sampling procedures if Cleanup or Performance Standards are exceeded in routine monitoring.

APPENDIX E

4. Description of alternate O&M:
 - a. Should systems fail, alternate procedures to prevent release or threatened releases of hazardous substances, pollutants or contaminants which may endanger public health and the environment or exceed performance standards; and
 - b. Analysis of vulnerability and additional resource requirement should a failure occur.
5. Corrective Action:
 - a. Description of corrective action to be implemented in the event that cleanup or performance standards are exceeded: and
 - b. Schedule for implementing these corrective actions.
6. Safety plan:
 - a. Description of precautions, of necessary equipment, etc., for Operable Unit #04 personnel; and
 - b. Safety tasks required in event of systems failure.
7. Description of equipment:
 - a. Equipment identification:
 - b. Installation of monitoring components;
 - c. Maintenance of Operable Unit #04 equipment; and
 - d. Replacement schedule for equipment and installed components.
8. Records and reporting mechanisms required:
 - a. Daily operating logs:
 - b. Laboratory records;
 - c. Records for operating costs;
 - d. Mechanism for reporting emergencies;
 - e. Personnel and maintenance records; and
 - f. Monthly/annual reports to State agencies.

Task 6: Performance Monitoring

Performance monitoring shall be conducted to ensure that all Performance Standards are met.

A. Performance Standard Verification Plan

The purpose of the Performance Standard Verification Plan is to provide a mechanism to ensure that both short-term and long-term Performance Standards for the Remedial Action are met. The Draft Performance Standards Verification Plan shall be submitted with the Prefinal Design. Once approved, the Performance Standards Verification Plan shall be implemented on the approved schedule. The Performance Standards Verification Plan shall include:

1. Quality Assurance Project Plan
2. Health and Safety Plan
3. Field Sampling Plan

APPENDIX E

4. Specification of those tasks to be performed by Weyerhaeuser to demonstrate compliance with the Performance Standards and a schedule for the performance of these tasks.

IV CONTENT OF SUPPORTING PLANS

The documents listed in this section, the Quality Assurance Project Plan, the Field Sampling Plan, the Health and Safety Plan, the Contingency Plan and the Construction Quality Assurance Plan are documents which must be prepared and submitted as outlined in Section III of this SOW. The following section describes the required contents of each of these supporting plans.

A. Quality Assurance Project Plan

Weyerhaeuser shall develop an Operable Unit #04 specific Quality Assurance Project Plan (QAPP), covering sample analysis and data handling for samples collected in all phases of the required Work, based upon the Consent Decree and guidance provided by U.S. EPA. The QAPP shall be consistent with the requirements of the EPA Contract Lab Program (CLP) for laboratories proposed outside the CLP. The QAPP shall at a minimum include:

Project Description

- * Operable Unit #04 History
- * Past Data Collection Activity
- * Project Scope
- * Sample Network Design
- * Parameters to be Tested and Frequency
- * Project Schedule

Project Organization and Responsibility

Quality Assurance Objective for Measurement Data

- * Level of Quality Control Effort
- * Accuracy, Precision and Sensitivity of Analysis
- * Completeness, Representativeness and Comparability

Sampling Procedures

Sample Custody

- * Field Specific Custody Procedures
- * Laboratory Chain of Custody Procedures

Calibration Procedures and Frequency

- * Field Instruments/Equipment
- * Laboratory Instruments

Analytical Procedures

- * Non-Contract Laboratory Program Analytical Methods
- * Field Screening and Analytical Protocol
- * Laboratory Procedures

Internal Quality Control Checks

- * Field Measurements
- * Laboratory Analysis

APPENDIX E

Data Reduction, Validation, and Reporting

- * Data Reduction
- * Data Validation
- * Data Reporting

Performance and System Audits

- * Internal Audits of Field Activity
- * Internal Laboratory Audit
- * External Field Audit
- * External Laboratory Audit

Preventive Maintenance

- * Routine Preventative Maintenance Procedures and Schedules
- * Field Instruments/Equipment
- * Laboratory Instruments

Specific Routine Procedures to Assess Data Precision, Accuracy, and Completeness

- * Field Measurement Data
- * Laboratory Data

Corrective Action

- * Sample Collection/Field Measurement
- * Laboratory Analysis

Quality Assurance Reports to Management

Weyerhaeuser shall submit the draft QAPP to U.S. EPA for review and approval. The QAPP shall be designed to address all phases of the project from pre-design to confirmatory sampling. If, because of the logistics of the project, the initial QAPP, developed as part of the RD Work Plan, does not lend itself to addressing all phases of the project, the QAPP shall be modified to incorporate any appropriate changes.

B. Health and Safety Plan

Weyerhaeuser shall develop a Health and Safety Plan which is designed to protect on-site personnel and area residents from physical, chemical and all other hazards posed by this remedial action. The Plan shall develop the performance levels and criteria necessary to address the following areas.

Description of Operable Unit #04

- Personnel
- Levels of protection
- Safe work practices and safe guards
- Medical surveillance
- Personal and environmental air monitoring
- Personal protective equipment
- Personal hygiene
- Decontamination - personal and equipment
- Operable Unit #04 work zones
- Contaminant control
- Contingency and emergency planning
- Logs, reports and record keeping

The safety plan shall follow U.S. EPA guidance and all OSHA requirements as outlined in 29 CFR 1910

APPENDIX E

and 1926. As part of the Health and Safety Plan, Weyerhaeuser shall include a Contingency Plan describing procedures to be used in the event of an accident or emergency at the site. The Contingency Plan shall include, at a minimum, the following:

1. Name of the person or entity responsible for responding in the event of an emergency incident.
2. Plan and date(s) for meeting(s) with the local community, including local, State and Federal agencies involved in the cleanup, as well as local emergency squads and hospitals.
3. First aid medical information.
4. Air Monitoring Plan (if applicable).
5. Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), as specified in 40 CFR Part 109 describing measures to prevent and contingency plans for potential spills and discharges from materials handling and transportation.

C. Field Sampling Plan

Weyerhaeuser shall develop a Field Sampling Plan (as described in " Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," October 1988). The Field Sampling Plan should supplement the QAPP and address all sample collection activities.

D. Construction Quality Assurance Plan

Weyerhaeuser shall submit a Construction Quality Assurance Plan (CQAP) which describes the Operable Unit #04 specific components of the quality assurance program which shall ensure that the completed project meets or exceeds all design criteria, plans, and specifications. The draft CQAP shall be submitted with the preliminary design and the final CQAP shall be submitted with the final design. The CQAP shall contain, at a minimum, the following elements:

1. Responsibilities and authorities of all organizations and key personnel involved in the design and construction of the Remedial Action.
2. Qualifications of the Quality Assurance Official to demonstrate he possesses the training and experience necessary to fulfill his identified responsibilities.
3. Protocols for sampling and testing used to monitor construction.
4. Identification of proposed quality assurance sampling activities including the sample size, locations, frequency of testing, acceptance and rejection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation. A description of the provisions for final storage of all records consistent with the requirements of the Consent Decree shall be included.
5. Reporting requirements for CQA activities shall be described in detail in the CQA plan. This shall include such items as daily summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, and final documentation. Provisions for the final storage of all records shall be presented in the

APPENDIX E

CQA plan.

V. SUMMARY OF MAJOR DELIVERABLES/SCHEDULE

A summary of the project schedule and reporting requirements contained in this SOW is presented below:

<u>Deliverable / Milestone</u>	<u>Due Date (calendar days)</u>
RD Work Plan	Sixty (60) days after Notice of Authorization to proceed with RD
Progress Reports	As described in the CD
Preliminary Design (30%)	Ninety (90) days after Weyerhaeuser's receipt of all validated pre-design sample results, or a longer period of time as may be specified by EPA
Intermediate Design (60%) (if required or submitted)	Ninety (90) days after receipt of U.S. EPA's comments on the Preliminary Design, or a longer period of time as may be specified by EPA
Prefinal Design (95%)	<p>If an Intermediate Design is required, or submitted, ninety (90) days after receipt of U.S. EPA comments on the Intermediate Design, or a longer period of time as may be specified by EPA</p> <p>If an Intermediate Design is not required or submitted one hundred eighty (180) days after receipt of U.S. EPA comments on the Preliminary Design, or a longer period of time as may be specified by EPA</p>
Final Design (100%)	Thirty (30) days after receipt of U.S. EPA comments on the Prefinal Design, or a longer period of time as may be specified by EPA
RA Workplan	Thirty (30) days after U.S. EPA approval of Final Design
Award RA Contract(s)	As defined in the approved RA Work Plan
Pre-Construction Inspection	As defined in the approved final RA Work Plan
Initiate Construction of RA	Fifteen (15) days after Pre-Construction Inspection and meeting
Completion of Construction	As approved by U.S. EPA in RA construction schedule included in RA Work Plan
Final Construction Completion Inspection	As approved by U.S. EPA in RA construction schedule included in RA Work Plan

APPENDIX E

Weyerhaeuser submittal of
Certification of Completion
of Construction Report

As approved by U.S. EPA in RA construction schedule included
in RA Work Plan

EPA issuance of Certification of
Completion of Construction for
purposes of disbursement under
Paragraph 3.c. of Appendix G of
the Consent Decree

As approved by U.S. EPA in RA construction schedule included
in RA Work Plan

Pre-certification inspection
of OU4 RA

Pursuant to Paragraph 65 of the Consent Decree

Certification of Completion of the
OU4 RA Report

Pursuant to Paragraph 65 of the Consent Decree

Final O & M Plan

As defined in the RA Work Plan

Pre-certification inspection of OU4
Work

Pursuant to Paragraph 66 of the Consent Decree

Certification of Completion of OU4
Work Report

Pursuant to Paragraph 66 of the Consent Decree

APPENDIX F

**ENVIRONMENTAL PROTECTION EASEMENT
AND
DECLARATION OF RESTRICTIVE COVENANTS**

1. This Environmental Protection Easement and Declaration of Restrictive Covenants is made this ____ day of _____, 19____, by and between _____, ("Grantor"), having an address of _____, and, _____ ("Grantee"), having an address of _____.

WITNESSETH:

2. WHEREAS, Grantor is the owner of a parcel of land located in the county of _____, State of _____, more particularly described on **Exhibit A** attached hereto and made a part hereof (the "Property"); and

3. WHEREAS, the Property is part of the _____ Superfund Site ("Site"), which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on _____, 19____; and

4. WHEREAS, in a Record of Decision dated _____, 19____ (the "ROD"), the EPA Region ____ Regional Administrator selected a "remedial action" for the Site, which provides, in part, for the following actions:

and

5. WHEREAS, with the exception of _____, the remedial action has been implemented at the Site; and

APPENDIX F

6. WHEREAS, the parties hereto have agreed 1) to grant a permanent right of access over the Property to the Grantee for purposes of implementing, facilitating and monitoring the remedial action; and 2) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and

7. WHEREAS, Grantor wishes to cooperate fully with the Grantee in the implementation of all response actions at the Site;

NOW, THEREFORE:

8. Grant: Grantor, on behalf of itself, its successors and assigns, in consideration of [the terms of the Consent Decree in the case of ____ v. ____, etc.], does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, and does give, grant and convey to the Grantee, and its assigns, with general warranties of title, 1) the perpetual right to enforce said use restrictions, and 2) an environmental protection easement of the nature and character, and for the purposes hereinafter set forth, with respect to the Property.

9. Purpose: It is the purpose of this instrument to convey to the Grantee real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to contaminants.

10. Restrictions on use: The following covenants, conditions, and restrictions apply to the use of the Property, run with the land and are binding on the Grantor:

11. Modification of restrictions: The above restrictions may be modified, or terminated in whole or in part, in writing, by the Grantee. If requested by the Grantor, such writing will be executed by Grantee in recordable form.

12. Environmental Protection Easement: Grantor hereby grants to the Grantee an irrevocable, permanent and continuing right of access at all reasonable times to the Property for purposes of:

- a) Implementing the response actions in the ROD, including but not limited to _____;
- b) Verifying any data or information submitted to EPA.
- c) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;

APPENDIX F

- d) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils, and specifically, without limitation, obtaining split or duplicate samples;
 - e) Conducting periodic reviews of the remedial action, including but not limited to, reviews required by applicable statutes and/or regulations; and
 - f) Implementing additional or new response actions if the Grantee, in its sole discretion, determines i) that such actions are necessary to protect the environment because either the original remedial action has proven to be ineffective or because new technology has been developed which will accomplish the purposes of the remedial action in a significantly more efficient or cost effective manner; and, ii) that the additional or new response actions will not impose any significantly greater burden on the Property or unduly interfere with the then existing uses of the Property.
13. Reserved rights of Grantor: Grantor hereby reserves unto itself, its successors, and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights and easements granted herein.
14. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP, or other federal law.
15. No Public Access and Use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.
16. Notice requirement: Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including but not limited to deeds, leases and mortgages, a notice which is in substantially the following form:

**NOTICE: THE INTEREST CONVEYED HEREBY IS
SUBJECT TO AN ENVIRONMENTAL PROTECTION
EASEMENT AND DECLARATION OF RESTRICTIVE
COVENANTS, DATED _____, 19__, RECORDED IN
THE PUBLIC LAND RECORDS ON _____, 19__, IN
BOOK _____, PAGE _____, IN FAVOR OF, AND
ENFORCEABLE BY, THE UNITED STATES OF
AMERICA.**

APPENDIX F

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide Grantee with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

17. Administrative jurisdiction: The federal agency having administrative jurisdiction over the interests acquired by the United States by this instrument is the EPA.

18. Enforcement: The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance or legal process. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. Enforcement of the terms of this instrument shall be at the discretion of the Grantee, and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Grantee under this instrument.

19. Damages: Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public or to the environment protected by this instrument.

20. Waiver of certain defenses: Grantor hereby waives any defense of laches, estoppel, or prescription.

21. Covenants: Grantor hereby covenants to and with the United States and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful right and power to sell and convey it or any interest therein, that the Property is free and clear of encumbrances, except those noted on **Exhibit D** attached hereto, and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

22. Notices: Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

To Grantee:

APPENDIX F

23. General provisions:

- a) Controlling law: The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.
- b) Liberal construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the grant to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.
- c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.
- d) Entire Agreement: This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings, or agreements relating thereto, all of which are merged herein.
- e) No Forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.
- f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.
- g) Successors: The covenants, terms, conditions, and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors, and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors, and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

APPENDIX F

h) Termination of Rights and Obligations: A party's rights and obligations under this instrument terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

i) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

j) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

TO HAVE AND TO HOLD unto the United States and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this Agreement to be signed in its name.

Executed this _____ day of _____, 19__.

By: _____

Its: _____

STATE OF _____)

) ss

COUNTY OF _____)

On this __ day of _____, 19__, before me, the undersigned, a Notary Public in and for the State of _____, duly commissioned and sworn, personally appeared _____, known to be the _____ of _____, the corporation that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute said instrument.

Witness my hand and official seal hereto affixed the day and year written above.

APPENDIX F

Notary Public in and for the
State of _____

My Commission Expires: _____.

This easement is accepted this ____ day of _____, 19__.

UNITED STATES OF AMERICA
the persons and/or entities named at the beginning of this document, identified as "Grantor" and
their personal representatives, heirs, successors, and assigns.

U.S. ENVIRONMENTAL PROTECTION
AGENCY

By: _____

Attachments:	Exhibit A	-	legal description of the Property
	Exhibit B	-	identification of proposed uses and construction plans, for the Property
	Exhibit C	-	identification of existing uses of the Property
	Exhibit D	-	list of permitted title encumbrances

Consent Decree Appendix G
Management of the Disbursement Special Account

1. Generally. Any funds deposited in the Disbursement Special Account pursuant to Consent Decree Paragraph 11 (Establishment and Management of the Disbursement Special Account) shall be managed and disbursed by EPA as provided in this Appendix G. This Appendix shall not apply to any funds other than those deposited in the Disbursement Special Account pursuant to Paragraph 11, or to any account other than the Disbursement Special Account.

2. Special Account Disbursements to Weyerhaeuser. EPA shall disburse funds from the Disbursement Special Account to Weyerhaeuser in accordance with the procedures and milestones for phased disbursement set forth in this Appendix G.

3. Disbursements of funds from the Disbursement Special Account shall coincide with the completion of the following milestones:

- a. EPA approval of the Mill RI/FS Report;
- b. EPA approval of any Remedial Design;
- c. EPA issuance of any certification of completion of construction;
- d. EPA approval of annual cost summary and certification reflecting any costs incurred during the previous year for O&M;
- e. EPA approval of any cost summary and certification reflecting costs incurred for any reviews conducted pursuant to Section 121(c) of CERCLA; and
- f. EPA certification of completion of any Work.

4. Once EPA determines that a milestone described in Paragraph 3 of this Appendix has been satisfactorily completed, EPA shall issue written confirmation to Weyerhaeuser. Within 30 days of issuance of EPA's written confirmation that a milestone of the Work has been satisfactorily completed, Weyerhaeuser shall submit to EPA a Cost Summary and Certification, as described in Paragraph 5, covering the Work performed for that milestone pursuant to this Consent Decree up to the date of completion of the milestone. Weyerhaeuser shall not include in any submission costs included in a previous Cost Summary and Certification following completion of an earlier milestone of the Work if those costs have been previously reimbursed.

5. Each Cost Summary and Certification prepared pursuant to Paragraph 4 of this Appendix shall include a complete and accurate written cost summary and certification of the necessary costs incurred and paid by Weyerhaeuser for the Work covered by the particular submission, excluding costs not eligible for disbursement under Paragraph 12 of the Consent Decree. Each Cost Summary and Certification shall contain the following statement signed by the financial officer in charge of such work at Weyerhaeuser:

To the best of my knowledge, after thorough investigation and review of Weyerhaeuser's documentation of costs incurred and paid for Work performed pursuant to this Consent Decree **[insert, as appropriate, "up to the date of completion of milestone a," "between the date of completion of milestone a and the date of completion of milestone b," "between the date of completion of milestone b and the date of completion of the milestone c,"]** I certify that the information contained in or accompanying this submittal is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

6. The financial officer for Weyerhaeuser shall also provide EPA a list of the documents that he or she reviewed in support of the Cost Summary and Certification. Upon request by EPA, Weyerhaeuser shall submit to EPA any additional information that EPA deems necessary for its review and approval of a Cost Summary and Certification.

7. If EPA finds that a Cost Summary and Certification includes a mathematical accounting error, costs excluded under Paragraph 12 of the Consent Decree, costs that are inadequately documented, or costs submitted in a prior Cost Summary and Certification, it will notify Weyerhaeuser and provide an opportunity to cure the deficiency by submitting a revised Cost Summary and Certification. If Weyerhaeuser fails to cure the deficiency within 30 days after being notified of, and given the opportunity to cure, the deficiency, EPA will recalculate Weyerhaeuser's costs eligible for disbursement for that submission and disburse the corrected amount to Weyerhaeuser in accordance with the payment procedures in this Appendix G. Weyerhaeuser may dispute EPA's recalculation under this Paragraph pursuant to Section XXII (Dispute Resolution). In no event shall Weyerhaeuser be disbursed funds from the Disbursement Special Account in excess of amounts properly documented in a Cost Summary and Certification accepted or modified by EPA.

8. Within 30 days of EPA's receipt of a Cost Summary and Certification, or if EPA has requested additional information or a revised Cost Summary and Certification, within 30 days of receipt of the additional information or revised Cost Summary and Certification, and subject to the conditions set forth in this Section, EPA shall notify Weyerhaeuser of the amount of the Cost Summary and Certification that has been approved for payment. Within 15 days after the notification of approval for payment, EPA shall disburse the funds from the Disbursement Special Account. EPA shall disburse the funds in the Special Disbursement Account in accordance with written instructions that Weyerhaeuser shall provide EPA after the Effective Date.

9. Termination of Disbursements from the Special Account. EPA's obligation to disburse funds from the Disbursement Special Account under this Consent Decree shall terminate upon EPA's determination that Weyerhaeuser: (a) has knowingly submitted a materially false or misleading Cost Summary and Certification; (b) has submitted a materially inaccurate or incomplete Cost Summary and Certification, and has failed to correct the materially

inaccurate or incomplete Cost Summary and Certification within 30 days after being notified of, and given the opportunity to cure, the deficiency; or (c) failed to submit a Cost Summary and Certification as required by Paragraph 4 of this Appendix within 30 days (or such longer period as EPA agrees) after being notified that EPA intends to terminate its obligation to make disbursements pursuant to this Section because of Weyerhaeuser's failure to submit the Cost Summary and Certification as required by Paragraph 4 of this Appendix. EPA's obligation to disburse funds from the Disbursement Special Account shall also terminate upon EPA's assumption of performance of the RI/FS, Mill Work, or OU4 Work under Paragraph 107 of the Consent Decree, when the assumption of the performance of such work is not challenged by Weyerhaeuser or, if challenged, is upheld under Section XXII (Dispute Resolution). Notwithstanding this Paragraph, if EPA's obligation to disburse funds is terminated due to EPA's assumption of performance of part of the Work at OU4 or the Mill, EPA may, in its sole discretion, continue to disburse funds to Weyerhaeuser for other Work at the Mill or OU4. Weyerhaeuser may dispute EPA's termination of special account disbursements under Section XXII (Dispute Resolution).

10. Recapture of Special Account Disbursements. Upon termination of disbursements from the Disbursement Special Account under Paragraph 9 of this Appendix, if EPA has previously disbursed funds from the Disbursement Special Account for activities specifically related to one or more of the reasons for termination in Paragraph 9 (*e.g.*, discovery of a materially false or misleading submission after disbursement of funds based on that submission), EPA shall submit a bill to Weyerhaeuser for those amounts already disbursed from the Disbursement Special Account specifically related to the reason for termination, plus Interest on that amount covering the period from the date of disbursement of the funds by EPA to the date of repayment of the funds by Weyerhaeuser. Within 20 days of receipt of EPA's bill, Weyerhaeuser shall reimburse the Hazardous Substance Superfund for the total amount billed. Weyerhaeuser shall make all payments required by this Paragraph by certified or cashier's check or by Electronic Wire Transfer ("EFT").

a. Payments made by check shall be made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making the payment, EPA Site/Spill ID Number 059B, and DOJ Case Number 90-11-2-13702/2. Payment by check shall be sent to: Environmental Protection Agency, Region 5, P.O. Box 70753, Chicago, Illinois 60673 (Attn: Superfund Accounting). Payment by Electronic Wire Transfer shall be sent to EPA's Region 5 lockbox bank, referencing: the name and address of Weyerhaeuser; the Site name; the Mill and OU4; the Site/Spill ID Number 059B; and the EPA docket number for this matter.

b. Payments made by EFT shall be made in accordance with instructions provided to Weyerhaeuser by EPA after the Effective Date. Payments received via EFT at the Region 5 lockbox bank after 11:00 AM (Central Time) will be credited on the next business day.

11. At the time of payment of monies under Paragraph 10 (Recapture of Special Account Disbursements), Weyerhaeuser shall send notice that payment has been made to the

United States, to EPA, and to the Regional Financial Management Officer, in accordance with Section XXIX (Notices and Submissions). Upon receipt of payment, EPA may deposit all or any portion thereof in the Allied Paper/Portage Creek/Kalamazoo River Special Account, the Kalamazoo River Special Account, the Disbursement Special Account, or the Hazardous Substance Superfund. The determination of where to deposit or how to use the funds shall not be subject to challenge by Weyerhaeuser pursuant to the dispute resolution provisions of this Consent Decree or in any other forum. Weyerhaeuser may dispute EPA's determination as to recapture of funds pursuant to Section XXII (Dispute Resolution).

12. Balance of Disbursement Special Account Funds. On or before EPA issues its written Certifications of Completion required by paragraphs 64 and 66, EPA shall calculate the present value of the O & M of each remedial action as required by the NCP, and the cost of Five-Year Reviews. After EPA issues its written Certification of Construction of the Mill remedial action or Certification of Construction of the OU4 remedial action, pursuant to this Consent Decree, whichever is later, if any funds remain in the Disbursement Special Account, EPA may transfer such funds into the EPA Hazardous Substance Superfund or into any other special account created for response actions at the Site, in the sole discretion of EPA, provided, however, that EPA shall retain in the Disbursement Special Account the present value of the Mill O & M and present values for Five-Year Reviews for the Mill and OU4. Any transfer of funds under this Paragraph shall not be subject to challenge by Weyerhaeuser pursuant to the dispute resolution provisions of this Consent Decree or in any other forum.

APPENDIX - H

PLAINWELL MILL PROPERTY DESCRIPTION

The Plainwell Mill Property is located at 200 Allegan Street in Plainwell, Michigan. The 34-acre property is bordered by the Kalamazoo River to the north, the Plainwell central business district to the east, residential property to the south, and the Plainwell wastewater treatment plant to the west. The legal description of the Mill is as follows:

PARCEL A: COMMENCING AT THE SOUTH QUARTER POST OF SECTION 20, TOWN 1 NORTH, RANGE 11 WEST, CITY OF PLAINWELL, ALLEGAN COUNTY, MICHIGAN; THENCE RUNNING NORTH 89 DEGREES 48' 33" EAST ALONG THE SOUTH LINE OF SAID SECTION, 54.87 FEET TO THE EAST LINE OF THE PENN CENTRAL RAILROAD RIGHT OF WAY AND THE POINT OF BEGINNING; THENCE NORTH 00 DEGREES 19' 13" EAST ALONG SAID EAST LINE, 510.00 FEET; THENCE NORTH 89 DEGREES 48' 33" EAST PARALLEL WITH SAID SOUTH LINE, 350.00 FEET; THENCE SOUTH 00 DEGREES 19' 13" WEST PARALLEL WITH SAID EAST LINE, 510.00 FEET, TO SAID SOUTH LINE; THENCE SOUTH 89 DEGREES 48' 33" WEST ALONG SAID SOUTH LINE, 350.00 FEET, TO THE POINT OF BEGINNING.

P.P. 0355-020-001-10

PARCEL B-1: COMMENCING NORTH 58 DEGREES 23' WEST 171.82 RODS FROM THE EAST QUARTER POST OF SECTION 30; THENCE NORTH 31 DEGREES 37' EAST 640 FEET; THENCE NORTH 58 DEGREES 23' WEST 150 FEET; THENCE SOUTH 31 DEGREES 37' WEST 475 FEET; THENCE SOUTH 58 DEGREES 23' EAST 66 FEET; THENCE SOUTH 31 DEGREES 37' WEST 165 FEET TO CENTER OF HIGHWAY; THENCE SOUTH 58 DEGREES 23' EAST 84 FEET TO THE PLACE OF BEGINNING.

P.P. 0355-030-077-00

PARCEL B-2: COMMENCING AT A POINT NORTH 58 DEGREES 23' WEST 176.91 RODS FROM THE EAST 1/4 POST OF SECTION 30, TOWN 1 NORTH, RANGE 11 WEST; THENCE NORTH 31 DEGREES 37' EAST 165 FEET; THENCE NORTH 58 DEGREES 23' WEST 66 FEET; THENCE SOUTH 31 DEGREES 37' WEST 165 FEET; THENCE SOUTH 58 DEGREES 23' EAST 66 FEET TO THE PLACE OF BEGINNING.

P.P, 0355-030-077-10

PARCEL C-1: COMMENCING AT A POINT NORTH 58 DEGREES 23' WEST, 180.91 RODS FROM THE EAST 1/4 POST OF SECTION 30, TOWN 1 NORTH, RANGE 11 WEST THENCE NORTH 31 DEGREES 37' EAST 640 FEET; THENCE NORTH 58 DEGREES 23' WEST 312.4 FEET; THENCE SOUTH 28 DEGREES 17' WEST 641.3 FEET TO CENTER OF HIGHWAY; THENCE SOUTH 58 DEGREES 23' EAST 275 FEET TO SAID POINT OF BEGINNING, EXCEPTING AND RESERVING A STRIP OF LAND 183.3 FEET WIDE OFF THE WESTERLY SIDE THEREOF.

P.P. 0355-030-077-20

PARCEL C-2: PART OF THE NORTH 1/2 OF SECTION 30, TOWN 1 NORTH, RANGE 11 WEST, DESCRIBED AS FOLLOWS: THE EAST 91 2/3 FEET OF THE WEST 183 1/3 FEET OF THE FOLLOWING DESCRIBED PREMISES; COMMENCING AT A POINT NORTH 58 DEGREES 23' WEST 180.91 RODS FROM THE EAST 1/4 POST OF SECTION 30, TOWN 1 NORTH, RANGE 11 WEST; THENCE NORTH 31 DEGREES 37' EAST 640.0 FEET; THENCE NORTH 58 DEGREES 23' WEST 312.4 FEET; THENCE SOUTH 28 DEGREES 17' WEST 641.3 FEET TO CENTER OF HIGHWAY; THENCE SOUTH 58 DEGREES 23' EAST 275 FEET TO SAID POINT OF BEGINNING.

P.P. 0355-030-077-30

PARCEL D: COMMENCING AT THE SOUTHWEST CORNER OF LOT 4, LASHER'S ADDITION TO THE VILLAGE (NOW CITY) OF PLAINWELL; THENCE WESTERLY ALONG THE NORTH LINE OF WEST ALLEGAN STREET 165 FEET; THENCE NORTHERLY 462 FEET; THENCE EASTERLY 165 FEET TO THE WEST LINE OF LASHER'S ADDITION; THENCE SOUTHERLY TO THE PLACE OF BEGINNING, BEING IN THE NORTHEAST 1/4 OF SECTION 30, TOWN 1 NORTH RANGE 11 WEST.

P.P. 0355-030-080-00

PARCELS 1, 2 AND 3: LOT 43 TO 48, INCLUSIVE, CORPORATION PLAT AND LOT 75, CORPORATION PLAT, EXCEPT THAT PART LYING WEST OF LOT 27 NORTHEASTERLY OF THE MILL RACE AND LOT 120, CORPORATION PLAT AND ALSO LOTS 1-12 AND LOTS 49-59, WHITNEY ADDITION. ALSO LOTS 1-16 LASHERS ADDITION.

P.P. 0355-160-043-00

PARCEL 4: VACATED RIVER STREET LOCATED IN RIVERVIEW ADDITION, ALSO THAT PART OF MICHIGAN AVENUE, VACATED, LYING BETWEEN THE SOUTHERLY SIDE OF RIVER STREET AND NORTHERLY OF A LINE CONNECTING THE SOUTHERLY SIDE OF LOT 25, BLOCK 1, AND SOUTHERLY SIDE OF LOT 21, BLOCK 2, RIVERVIEW ADDITION, ALSO THAT PART OF PROSPECT AVENUE, VACATED, LYING BETWEEN THE SOUTHERLY SIDE OF RIVER STREET AND NORTHERLY OF SOUTHERLY EXTENSION OF SOUTHERLY LINE OF LOT 40, BLOCK 1, RIVERVIEW ADDITION, ALSO LOTS 25 THRU 40, BLOCK 1, ALSO LOTS 16 THRU 30, BLOCK 2, RIVERVIEW ADDITION.

P.P. 0355-280-013-00

PARCEL 5: COMMENCING AT THE SOUTHWEST CORNER OF LOT 25, BLOCK 2, RIVERVIEW ADDITION; THENCE NORTHWESTERLY PARALLEL WITH ALLEGAN STREET 463 FEET; THENCE NORTH 31 DEGREES 32' EAST TO THE LEFT BANK OF KALAMAZOO RIVER; THENCE SOUTHERLY ON SAID RIVER BANK TO THE NORTHWEST CORNER OF RIVERVIEW ADDITION; THENCE SOUTH 31 DEGREES 37' WEST ALONG THE WEST LINE OF SAID ADDITION, 189 FEET TO POINT OF BEGINNING, SECTION 30, TOWN 1 NORTH, RANGE 11 WEST.

P,P. 0355-030-076-00

PARCEL 7: COMMENCING ON THE WEST LINE OF LASHER'S ADDITION 495 FEET ON SAID ADDITION LINE FROM THE CENTER LINE OF ALLEGAN STREET; THENCE NORTH

58 DEGREES 23' WEST 231 FEET; THENCE SOUTH 31 DEGREES 37' WEST 57.25 FEET; THENCE NORTH 58 DEGREES 23' WEST 99 FEET TO THE EAST LINE OF RIVERVIEW ADDITION; THENCE NORTH 31 DEGREES 37' EAST TO LEFT BANK OF THE KALAMAZOO RIVER; THENCE SOUTHEASTERLY ON SAID RIVER BANK TO THE NORTHWEST CORNER OF LOT 16, LASHER'S ADDITION; THENCE SOUTHWESTERLY TO BEGINNING. SECTION 30, TOWN 1 NORTH, RANGE 11 WEST.

PARCEL 7 WAS FORMERLY DESCRIBED AS COMMENCING AT THE SOUTHWEST CORNER OF LOT 16 OF LASHER'S ADDITION TO THE VILLAGE (NOW CITY) OF PLAINWELL, MICHIGAN, ACCORDING TO THE PLAT THEREOF OF RECORD AND ON FILE IN THE OFFICE OF THE REGISTER OF DEEDS FOR SAID COUNTY, SAID POINT BEING 462 FEET NORTHERLY OF THE NORTH LINE OF ALLEGAN STREET;

THENCE WESTERLY 226.4 FEET TO A POINT 49S FEET NORTHERLY OF THE NORTH LINE OF ALLEGAN STREET, MEASURED ALONG A LINE PARALLEL WITH THE EAST LINE OF PROSPECT AVENUE, AS SHOWN ON THE PLAT OF RIVERVIEW ADDITION, ACCORDING TO THE PLAT THEREOF OF RECORD AND ON FILE IN THE OFFICE OF THE REGISTER OF DEEDS FOR SAID COUNTY; THENCE SOUTHERLY PARALLEL WITH THE EAST LINE OF PROSPECT AVENUE AS SHOWN ON THE PLAT OF SAID R.IVERVIEW ADDITION, TO A POLNT 437.25 FEET NORTHERLY OF THE NORTH LINE OF SAID ALLEGAN STREET, MEASURED ALONG A LINE PARALLEL WITH THE EAST LINE OF SAID PROSPECT AVENUE; THENCE WESTERLY 99 FEET TO A POINT 437.25 FEET NORTHERLY, AS MEASURED ALONG THE EASTERLY LINE OF SAID PROSPECT AVENUE, OF THE NORTH LINE OF ALLEGAN STREET AND ON THE EAST LINE OF SAID PROSPECT AVENUE; THENCE NORTHERLY ON THE EASTERLY LINE OF SAID PROSPECT AVENUE AND THE NORTHERLY EXTENSION THEREOF TO THE KALAMAZOO RIVER; THENCE SOUTHEASTERLY ALONG SAID RIVER TO THE NORTHWEST CORNER OF LOT 16 OF SAID LASHER'S ADDITION; THENCE ALONG THE WEST LINE OF SAID LOT 16 TO THE PLACE OF BEGINNING.

C-1